



GOODRICH Safety Tread TYRES

The Tyre that made motoring safe

THE B.F. GOODRICH CO., LTD., 117-123 GOLDEN LANE, LONDON, E.





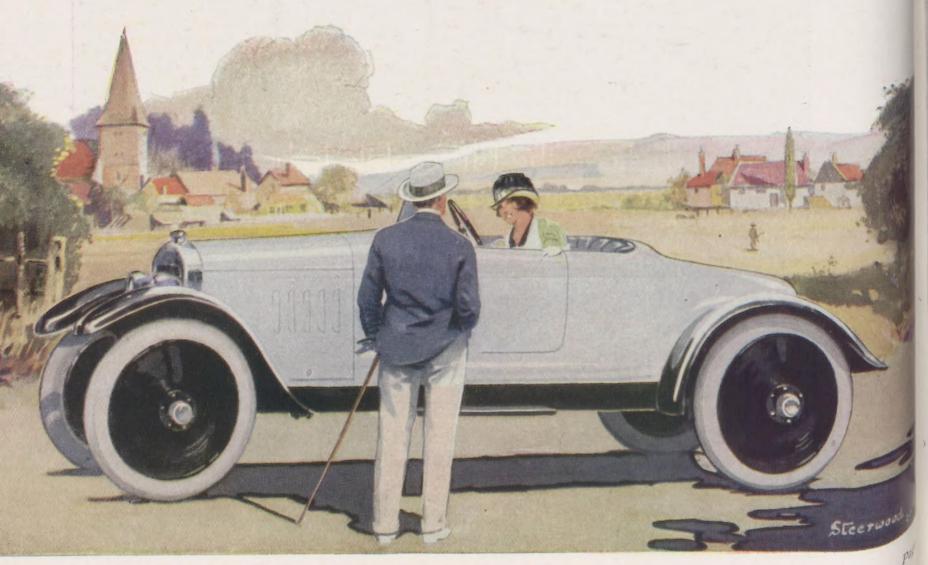


12 H.P. 4-cyl. Engine3-Speeds Self-starterElectric LightingDetachable Disc Wheels

Price ready for the road:

2-Seated Car complete
£550

96-98 VICTORIA STREET S.W.1

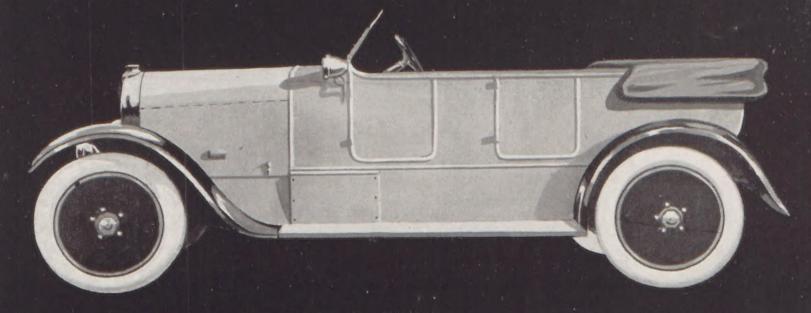


Page iii

## THE RIGHT CAR AT THE RIGHT PRICE



Cubitte Car Car Complete



CUBITTS' ENGINEERING COLTD

SHOWROOMS: 56, CONDUIT ST LONDON, W. SERVICE STATION: 258 GRAYS INN RP LONDON, W.C. WORKS: AYLESBURY, ENGLAND.



### THE TRANSPORT PROBLEM SOLVED

THE industrial vehicle is the only practical solution to the freight problem. Railway rates are prohibitive, to say nothing of rough handling, delays which extend into weeks, and congestion every. where. Be independent of these things—collect your own goods at the docks and deliver them to your own warehouses, handled by your own employees. The following comparisons are between PACKARD and ten other leading makes of industrial vehicles: PACKARDS show 10 per cent. lower petrol costs than any other show 30 per cent lower petrol costs than any They show 30 per cent. lower repair cost than any other. They show a lower wage cost per ton-mile transportation the trip in shorter time the trip in shorter time.

Consult PACKARDS, who will give you expert advice in transport difficulties, free of charge, which in no way binds to buy PACKARD products.

### ASK THE MAN WHO OWNS ONE

Sole Concessionnaires:

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STEPHEN JOHNSON GENERAL MANAGER

Telephone: Gerrard 713

Telegrams: "Cegaunpaca, Piccy, London"



Showrooms: 198, PICCADILLY, Service Station and HENDON, N.

The Motor-Owner, February, 1921



The 30-98 h.p. Vauxhall-Velox fast light touring car, seating 4 - \$1675

EXTREMELY fast—approximating in speed to the fastest racing cars in the world—the 30-98 h.p. Vauxhall is at the same time remarkable for refinement, silence and economy.

The petrol consumption at high touring speeds can be well under a gallon to twenty miles. A tyre life of 6000 miles is by no means unusual.

The engine retains the sweetness of running characteristic of Vauxhall machines, and the car is very considerably easier to handle at low speeds than the ordinary touring car of other makes.

The best indication that can be given of the speed and power of the 30-98 h.p. Vauxhall is that a car of this type, with 'four up,' climbed Shelsley Walsh Hill from a standing start in 55.2 secs., average speed 42 m.p.h.

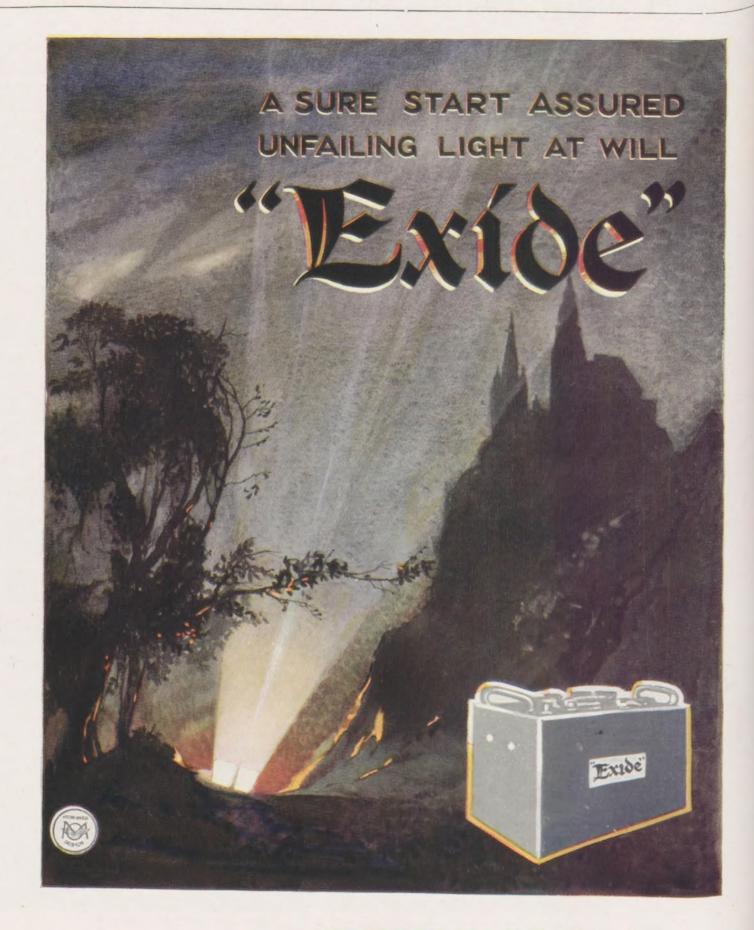
Intending buyers of bestclass cars are invited to send for catalogue OR giving full particulars of the 25 h.p. and the 30-98 h.p. types.



VAUXHALL MOTORS LIMITED LUTON BEDFORDSHIRE

Telephone: Luton 466 (4 lines)

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### NEW POWER AND NEW LIFE

can be introduced into the Starting and Lighting System on your Cars by fitting

Batteries A Battery for every car

LOOK BATTER FOR THIS SIGN



Wherever you see this sign, you can be assured of expert service, no matter what make of battery you have in your car. Your battery will be made to last as long as possible, until you are ready to replace it with an Exide—the long-life battery.

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CLIFTON JUNCTION MANCHESTER

ELECTRICAL STORAGE 220 SHAFTESBURY AVENUE, LONDON, W.C.2

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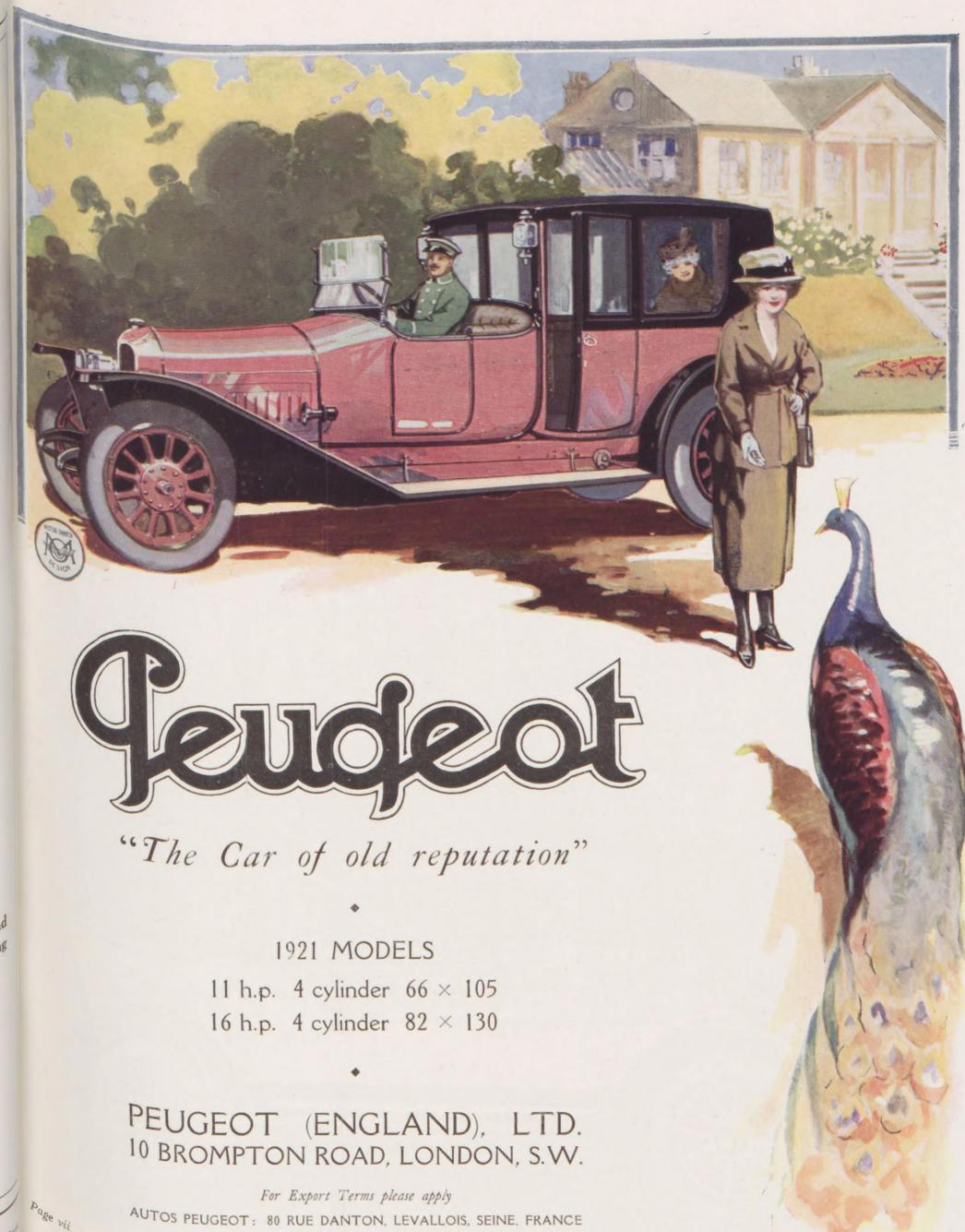
our Cars by fitting

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The Motor-Owner, February, 1921

## REDUCTION in PRICES



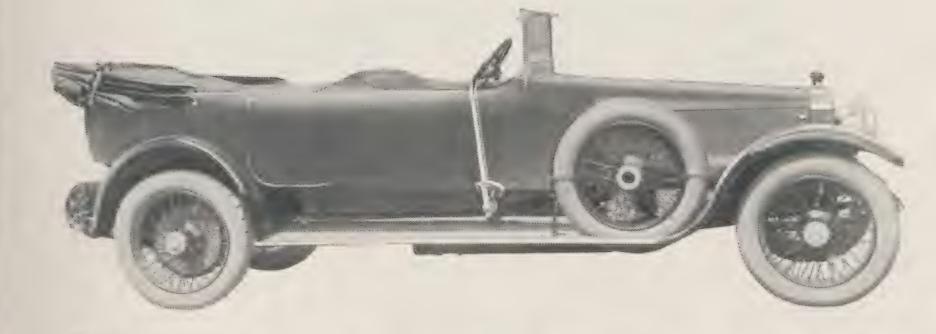
"LIGHT THIRTY" 6 cyl. chassis, price, £900

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Full particulars of complete cars can be obtained from your usual Agents or will be sent upon application to Coventry



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10.4 H.P. 65mm/98mm

45 - M. P. H. 40 - M. P. G.

3 Speeds
Fitted with Self-Starter and
Lighting Set
Michelin Tyres
Bosch Magneto
Spare wheel and tyre

£500

### OTHER MODE

15.5 H.P. 2 Seater

4 Seater

18'3 H.P. 4 Seater

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31.1 H.P. 4 Seater

AND THE

### SPECIAL SPORTING

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ALL THE SAME SPECIFICATI BUT HAVING FOUR SPEE



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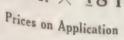
## YOUR CAR IS WORTHY OF A GOOD GARAGE!

## B. & P. MOTOR HOUSE

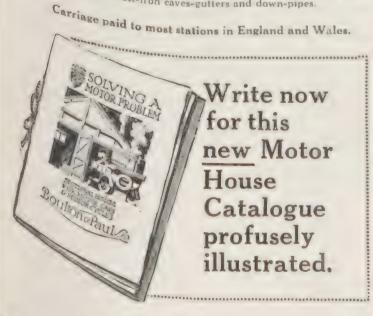
Made in the following sizes

Depth Width 15 ft.  $\times$  18 ft. 18 ft,  $\times$  18 ft. 20 ft,  $\times$  18 ft.

24 ft.  $\times$  18 ft.



he illustration shows a B. & P. Motor House constructed of strong ide with rustic joint weather-boarding and bottom portion stained painted white wood preserving preparation. The upper portion againsted white and finished with half-timber overlays, and moulding painted dark brown, the inside woodwork being oil stained. Sats, fitted with strong hinges and good locks. Windows glazed talian pattern iron, with felt and match-boarding for lining, barge care.



Page xi

This is an example of a typical Boulton & Paul Garage, showing how a really first-class Garage can be made to blend with the surroundings and serve its utilitarian purpose without becoming obtrusive. We are specialists in the manufacture of Garages for all purposes. We believe in making a House worthy of your car, and worthy of being placed in conjunction with the most charming garden or grounds.

In addition to saving Garage charges, B. & P. Motor-Car Houses are thoroughly well-built. Made with selected timber by skilled workmen in our Norwich Factories. They are portable, easily erected by unskilled labour and are offered at prices within reach of all.

> Enquiries invited for Garden Frames, Greenhouses, Conservatories, Verandahs, Poultry Houses, Kennels and Wood Buildings of every description. Also the Chaine-Helice Water Elevator and the "Electolite" Generating Set Generating Set

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"I hasten to le are simply as I could not g Thas letter to take a from

WONDERFUL FL Write to-day for ful Generous Allowance

THE DI PUTNEY 1683



It is scarcely nece creased reputation hold in the popul Efficiency Trials classic events of la attest their value.

THE OGS Telephone CH18

Page xiii

### NO-JET THE NEW PATENT Y Carburator (E. Degory's World's Patents.)

NO JETS

NO SPRING VALVES

NO TROUBLE

A Typical Expression of Opinion

"The Church Farm, Woodbastwick, Norwich.

are simply astounding. The car is 5 m.p.h. faster than with the carburetter fitted by the makers, and whereas with most careful tuning tonsider you are public benefactors if the public will only realise it. You may make any use of this letter you like.

"H. S. C. RICHARDSON, Capt."

1 consider you are public benefactors If the public letter i, taken from the enormous mass of similar testimony in our possession.)

THE ABOVE RESULT MEANS

**INCREASED** MILES per GALLON

WONDERFUL FUEL ECONOMY

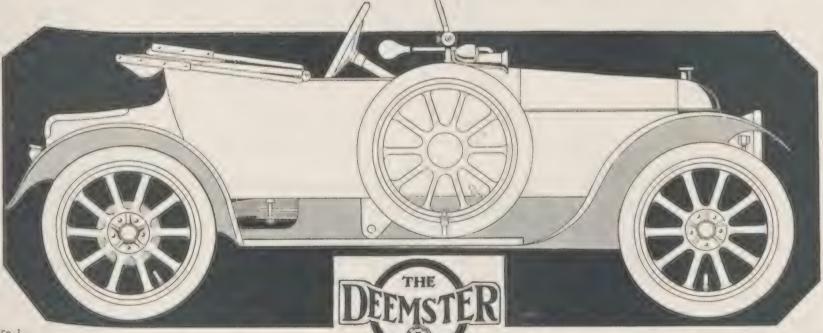
Write to-day for full particulars of our unprecedented offer of Free Fitting, Adjusting, and Tuning, also Handsome Illustrated Descriptive Booklet.

Cash refunded if not entirely satisfactory, providing the Carburators are returned within 15 days of delivery, less a small amount for expense incurred.

THE DEGORY NO-JET CARBURATOR CO. (Section A.2)

93, Moore Park Road, FULHAM, London, S.W.6

(Near Walham Green Station, District Rly.)



It is scarcely necessary to emphasize the greatly in-creased reputation of Doomster. Cars now creased reputation that the "Deemster The succession of the succes hold in the popular esteem. The successes of the in the South Harting Hill Climb and the General Efficiency Trials of the Junior Car Club, the two classic events of last season, but confirm and further

Particulars on request .

Car prices: £475 Standard two-seater ... Cabriolet Coupé ... Sports Model ... Standard Four-Seater...

Complete with Lighting Set, Seat Starter, and all accessories

The "Deemster" Car is, in fact, a large Car in miniature, possessing all those attributes most appreciated by the discriminate motorist. - Silence, comfort, flexibility, excellent hill climbing, together with a guaranteed petrol consumption of at least 50 miles per gallon.

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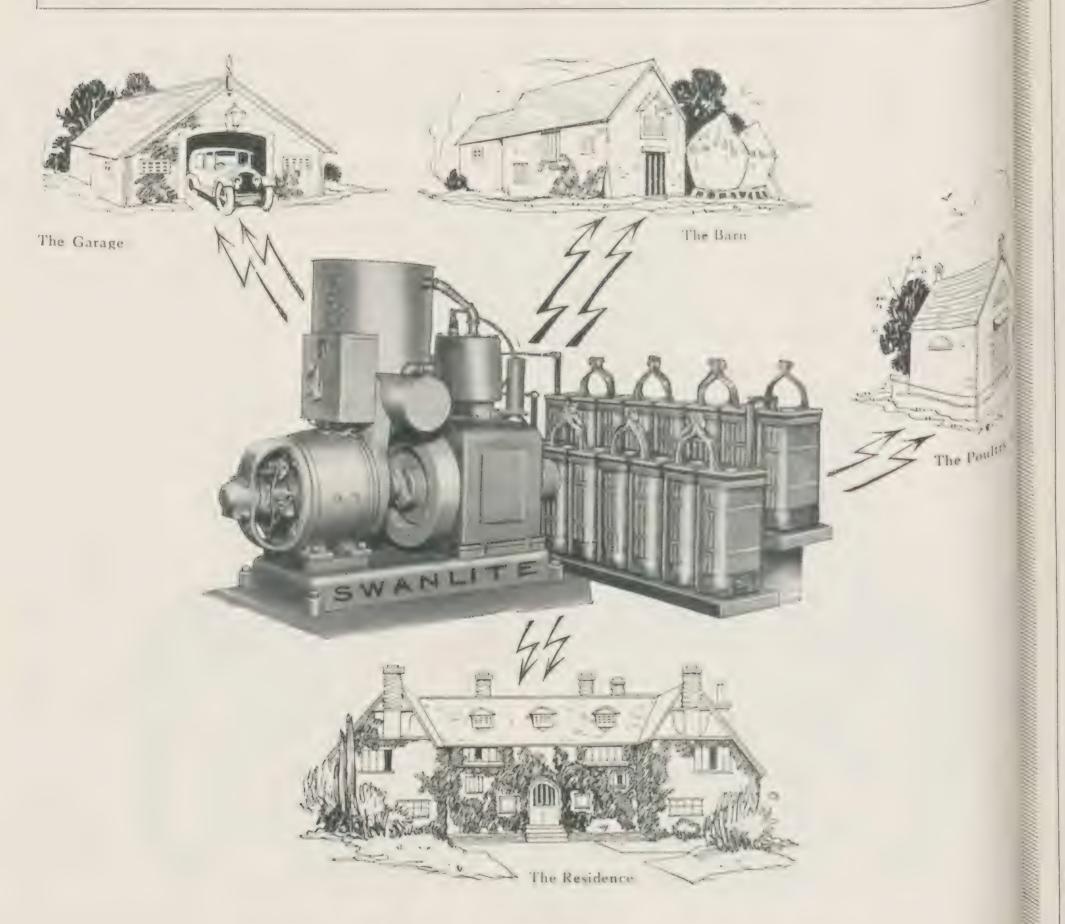
Seat Starter, and all accessories

THE OGSTON MOTOR COMPANY (1918) LTD., Deemster Works, Victoria Rd., Acton, London, W.3

Telegrams: "Ogstonia." London Telephone CHISWICK 1289 & 2014.

## SWANLITE

The Perfected Plant for Light & Power on the Estal



### THE BLACK SWAN COMPANY

GOLDEN HOUSE, 29 GT. PULTENEY STREET, LONDON, W.1

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### Tuned Reverberation

TUNED REVERBERATION is the fundamental principle of Marconi-ism. Marconi turned the Globe into a great violin. By means of it the sound of a sigh in Arcadia can be heard in Piccadilly.

As Marconi is to reverberation so is the HOUSE OF CRAWFORD to national and international publicity.

The heads of the HOUSE OF CRAWFORD are a school of world vibrators. Touch a CRAWFORD string in London and it will live again in Bombay. Draw the CRAWFORD bow across a string in Scotland and it will reverberate in Lancashire and beyond.

Have you something to tell the world? Have you a message about the goods you make or distribute which ought to reach the ears and quicken the interest of a wide public?

## Ask CRAWFORD'S to vibrate it

NB The Adventisement reproduced here was writlen by a Crawford Client who is a well-known National Advertiser.

NATIONAL OPINION needs directing by vivid, forceful, terse presentation of simple facts—by advertising.

Confusion of thought and lack of active interest in the public mind are as bad for the settlement of issues as for the selling of goods.

The service of a strong organisation which has had successes for national advertisers is indispensable to those whose work or duty it is to stimulate and direct the public mind. If you think of advertising consult us.

### W · S · CRAWFORD LTD

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## True Economy

consists in getting the best. The cost is important, but it is not as important as quality. In most commodities quality is the first consideration, and cost secondary. Fine clothes are cheaper than cheap clothes of inferior quality. Fine silk is cheaper than second-rate silk. Fine leather will cost you more than cheap leather, but remember that a doctor's bill may be saved by the fine article. Fine doctors are cheaper than cheap doctors.

In food the principle is even more important. A small meal of superb quality will nourish you more than a large meal of coarse food. A dainty cutlet is better than a pound of horseflesh.

More than ever—owing to unfair legislation—we must be careful of what we drink. One glass of good Whisky is better than two glasses of doubtful quality. That is why you should get

### Haig & Haig Five Stars Scots Whisky

when you can. When control comes off you will have to pay more for it than for other Whiskies, but it will be better for you to get it if you can, and, if you must economise, drink a little less of it. In all countries where there is open competition HAIG & HAIG gets the highest price from discriminating users.

HAIG & HAIG LTD (Distillers since 1679)
Head Office: 57 Southwark Street, LONDON, S.E.1

We are advertising only cur Export Bottle at present. The Government controls the price of whisky so that there is a loss on every case sold in the Home Market.



## THE

Dry after driving fre Continuous Rain.

left Skipton when was raining so hard whe raining so hard whe return by train I should return by train I should return have done so, lone but face the rain—
I ran through ten hours' of the coat getting wet at and by the time I got he coat was absolutely dependent.

R.N.D., Lone [Exposed for 12 Hou I motored yesterday for london was delighted to find at was perfectly dry. A mours, I consider that ably." P.E.E., Kingst

130 Miles in Rain W

Out Getting Wet.

We the Burberry and

the rain and thirty mile slightest moisture un somplete without your 1 o.S., Wick.

THE BURBERR as the most effic it embodies in its des Security, II Male in special mater processes, it effe carching wind, v increasing liability to c Voluminous in plan, BERRY can be wor reedom or comfort. getting through the torect the wrists and Desensive power and w linings of proofed c ble linings of fleece, f

Bd. Malesherbe

The Avis

## my

is important, In most comon, and cost cheap clothes than seconde than cheap may be saved cheaper than

int. A small more than a itlet is better

ion—we must good Whisky lity. That is

## stars

you will have es, but it will i, if you must all countries & HAIG gets I'S.

ers since 1679) NDON, S.E.1

itle loss tet.

## THE BURBERRY

Dry after driving from Orkshire to London in Continuous Rain.

I left Skipton when the tas raise at its height. It started it is neight. started that had I been able to certain! here have done so, but here was nothing else to be lone but face the rain—and his without hood or screen. ran through ten hours' coninuous rain without the lining At Welwyn the rain stopped, the cont in the last home he coat was absolutely dry." -R.N.D., London.

Exposed for 12 Hours.

motored yesterday from leavy continuated London in was delight to London and nd of shed to find at the as perfectly dry. As I vas exposed for nearly twelve hours, I consider that The holy. P.E.E., Kingston.

130 Miles in Rain With-Cut Getting Wet.

Your Burberry and rugs the most perfect things have ever seen; drove one the rain and thirty miles in slightest ne rain and sleet, and not the slightest moisture undersomplete motor can be berry, without your BurWick Serry." O.S., Wick.

BURBERRY (Motor Model) is universally regarded available for motoring, as the most efficient weatherproof available for motoring, it embodies in its design every essential characteristic that con-Jale in Security, Health and Comfort.

Processes in a special materials, woven and proofed by exclusive Burbrocesses in a processes in a processe in a processes in a processe in a processes in a processe in a processes in a p processes, it effectively resists penetration by driving rain searching wind, without engendering unhealthy heat or increasing liability to chill.

BERRY can be with extra wide arm-holes, THE BUR-BERRY in plan, with extra wide arm-holes, THE Box freedom or can be worn over another top-coat without loss of conference of the conferenc freedom can be worn over another top-coat without ross conting through through Double-buttoning fronts prevent wet through the button-holes, whilst special wind-cuffs button-holes, Dag through the button.

Dag and fore-arms.

Defensive power and fore-arms.

The power and warmth are enhanced in THE BURBERRY

The power and warmth are enhanced in THE BURBERRY

The power and warmth are enhanced in THE BURBERRY hings of proofed check or silk, or by the addition of detachible linings of proofed check or sur, of fleece, fur or leather.

Add Malesherbes PARIS; & Agents in Provincial Towns



### Something QUITE NEW in Carburettors

### An EASY STARTING LEVER

Instantly moved to one position, it makes the most stubborn engine start as if by magic when stone cold, and enables you to drive away at full power without "coughing."

PLEASE SEND FOR LISTS.

SPECIAL 'AUSTIN' MODELS 20 MILES PER GALL. 50 MILES PER HOUR

ALSO SPECIAL SPARK PLUGS 2/6

**EACH** 

PRICES:

10/15 £5 15 0

15/20

£6 15 0 20/40

£7 15 0

VERY EASILY FITTED

A MONTH TRIAL ALLOWED

Also has a finger-adjusted main jet, done in an instant, to suit every condition of road or load, enabling you to effect a direct saving in petrol in many cases of 25 to 50%.

THIS IMPORTANT INVENTION RENDERS OTHER CARBURETTORS OBSOLETE

C. BINKS (1920) Ltd. ECCLES MANCHESTER

### DISCS

Polished Aluminium, or light steel, for any make of car, wire or artillery wheels, £1 5s. per wheel (2 discs per wheel), accurate and good finish.



SERVICE MANUFACTURING CO. 67, Dalberg Road, Brixton, S.W.

## MOTOR MANIA

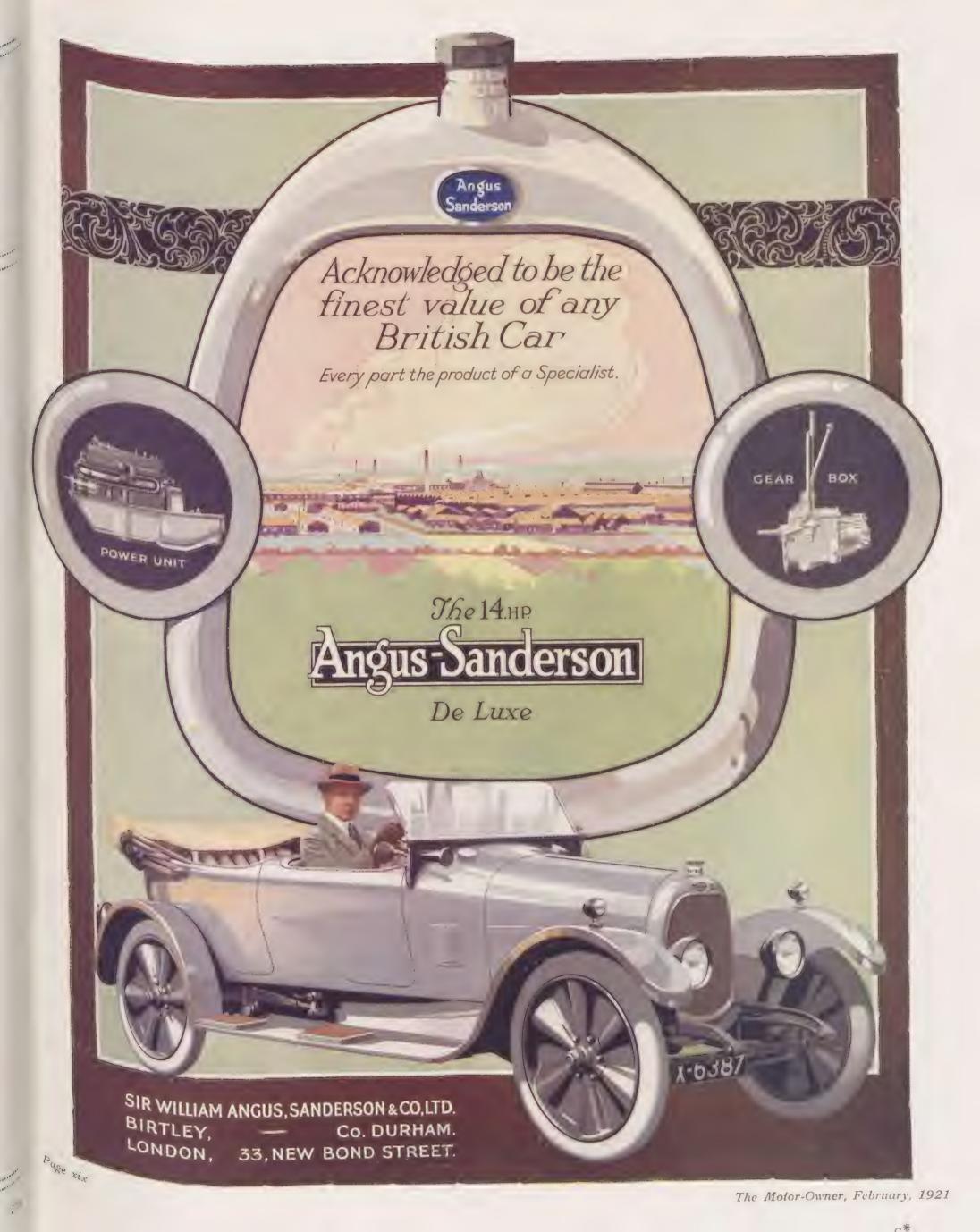


THE MOTOR OWNER TWO SHILLINGS & SIXPENCE

### Heath Robinson at his funniest TIGHTHROMANIBURER VIR TAND ROSANDON HIG ALIMAN FILIPER FILIPE PLANTING HIGH HIGH HIGH PARTICULAR FOR FOR FOR FILIPE

On Sale at all Bookstalls, or from the Publisher "The Motor-Owner," 10 Henrietta Street, Covent Garden, London, W.C.







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or the year 1920
HORSE POWER
u get fullest possiey by using only
BENZOLE

\_BENZOLE takes greater efficiency ner Motor Spirit

CIENT AND DTOR SPIRIT

CATING OILS

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ole Co., Ltd. IOR GARDENS, S.W.

- 1-7, Hill Stree! nman Street, Deansgate in Buildings, King Street Buildings, Grange Road





Page R. SQUIRE LIMITED, 65, ANGEL ROAD, EDMONTON, LONDON, N. 18
St. James's 12
The Motor-Owner, February, 1921



# HUDSON SUPER-SIX CARS Shaw & Kilburn Ltd

"He'll sa

with Py

Re

Sold by all I Write to-day for our THE PYRENE

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SOLE WHOLESALE AND RETAIL DISTRIBUTORS IN LONDON, MIDDLESEX, HERTS, ESSEX, KENT, SURREY, AND SUSSEX

114 Wardour Street, W.1

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ETTERS in praise of Pyrene are continually reaching us from grateful owners who have saved their cars from fire with this handy little extinguisher. They emphasise the ever-present risk of fire, and also prove the remarkable efficiency of the Pyrene Fire Extinguisher

Read this letter

"Owing to the flooding of the carburetter with an excess of petrol, when we started the car up this morning, the engine back-fired, the whole garage floor was on fire, as well as the carburetter. We brought one PYRENE Fire Extinguisher into use, and in less than two seconds everything was in order, and no signs of damage of any description, either on the car or anywhere else; in fact, I think it the smartest piece of work I have ever seen.

ARS are catching fire every day; yours may be the next. Be prepared with Pyrene; you can then put out a fire before the damage is done. Pyrene is itself non-damaging. It is always ready.

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Telephone: Victoria 8592 (4 lines) Telegrams: "Purenestin, Soucet, London." ALSO PROTECT YOUR HOME BY INSTALLING PYRENE Telephone: Victoria 8592 (4 lines)



## One thing the GOVT. does not compel you to do

-is to fully insure your car. Your own interest is all the compulsion needed for that. Before paying your car insurance premium get the British Oak quotation for a comprehensive policy.

Example—The B.O. premium on a 20 h.p. car value £900 is £4 7s. 0d. less than that quoted by Tariff Offices

A P.C. stating h.p. and value of your car will bring by return a similarly favourable quotation.

PROMPT SETTLEMENT OF CLAIMS

Independent Office"

Insurance Co., Ltd., Coleman St. House, London, E.C.2 TOTAL SECURITY OVER £1,000,000



is specially blended by experts to suit all makes and conditions of cars. It reduces running costs and gives the most efficient lubrication with a minimum of carbonisation. If you want to know how well YOUR car can run, try lubricating with I.L.O. MOTOR Ask for it at your garage. Look for the blue and gold tin.

### W. B. DICK & CO., LTD.

26, GROSVENOR GARDENS, LONDON, S.W.1

Telegrams: "Dicotto, Vic, London." Telephone: Victoria 7533 (4 lines.)



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The "All-Weather" Arrol-Johnston

"All-Weather" Arrol-Johnston Car and comes from Mr. Arthur Leigh of Tettenhall, Wolverhampton a gentleman who has owned 10 high-grade cars of various types during the past 17 years:

"I am very pleased indeed with my 'All-Weather' Arrol-Johnston Car, which is greatly admired by everyone and is the subject of very favourable criticism on every hand. Being of moderate power, economical to run and of extremely smart appearance, it is, without a doubt, THE MOST ADMIRED CAR IN WOLVERHAMPTON"

PRICE, with Electric Lighting & Starting, 5 Dunlop Magnums (815 x 105 mm.), 5 Michelin Detachable Disc Wheels, Electric Horn, &c., &c.

£895

Arrol-Johnston Ltd., Dumfries. Trial Runs & Catalogues on demand

Page XXD

London Agents: Leverett, Thorp & Kearton, Ltd., 122 New Bond St., W.1



'Phone: Regent 691

Telegrams: "Ockinswamo, Phone, Lot

## THE TEMPERING ITALY'S FAMOUS LIGHT CAR

ENGINE: 8-10 h.p. V Twin Deeply Finned, Air-cooled by fan, 85 mm, 89 mm, c.c. 1000. High-tension Bosch Magneto.

CLUTCH: Dry Plate, no lubrication required.

PROPELLER SHAFT: Enclosed.

GEARS: 3 Speeds forward and reverse (patented), Gati Internal expanding brakes. Hood, Screen, Spare wheel. 8 cwt., 45-50 m.p.h., 50-60 m.p.g. Approx. price £285. no chains. Acknowledged one of the finest Light the market.

## TEMPERINO MOTORS (Great Britain) LIM

Managing Director: J. S. WOOD

Sole Concessionnaires for GREAT BRITAIN AND IRELAND

A CAR THAT IS BUILT TO LAST PROMPT DELIVERY LARGE STOCK OF SPARE PARTS TRIAL RUNS ARRANGED BY APPOINTMENT CALL, SEE, AND TRY THIS WONDERFUL CAR

WALDORF HOL ALDWYCH, LONDO Opposite Strand Theal

FOR ECONOMY, SPEED AND COMFORT IT IS SECOND

1921 MODELS

IMMEDIATE DELIVERIES

ORDER E

The Motor-Owner, February, 1921

## WHAT IS THE BEST CAR OF THE YEAR?

Mr. W. H. Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, the well-known Motoring Writer, said, in an article while Berry, w article which recently appeared in the "Daily Despatch": "Here we reach it is recently appeared in the "Daily Despatch": "Taking we reach the problem of what is the best car of the year. Taking everything the problem of what is the best car of the year. everything into consideration, factory, service, design and material used. I have the problem of what is the best car of the year. used, I have no hesitation in casting my vote for the 16 h.p. TALBOT-DARRACQ (4 cylinder)"

# ALBOT-)ARRACQ

INDIVIDUALITY is the keynote of TALBOT-DARRACQ cars. The utmost in simplicity, quality, and manufacturing method is embodied in their conception, and these vehicles present a symmetrical combination of the newest and latest ideas in automobile design. The surprising excellence of each outstanding feature—each a distinct advance in motor car development distinguishes TALBOT-DARRACQ design from all others

The DARRACQ MOTOR ENGINEERING CO. Ltd. Townmend Road, Fulham, London, S.W,6

Showrooms: 150 New Bond Street, London, W.1



The Motor-Owner, February, 1921





ARNIVAL!—What pictures of enchantment the very word conjures up in the mind! The merry, struggling multitudes, kaleidoscopic and ever changing in an abandon reckless gaiety; its riot of colour; its mimic battle flowers, its weapons a cascade of rose petals perfuming

the soft night air; the clash of music mingled with the clamour tongues; the blaze of many coloured lights and the deep purp shadows, contrasting vividly with the calm stillness of the summer's night

But one by the a white st in these TWIN anythin whereve the che

Sole: Concessionnaires:

THE W. C. GAUNT CO.

STEPHEN JOHNSON GENERAL MANAGER

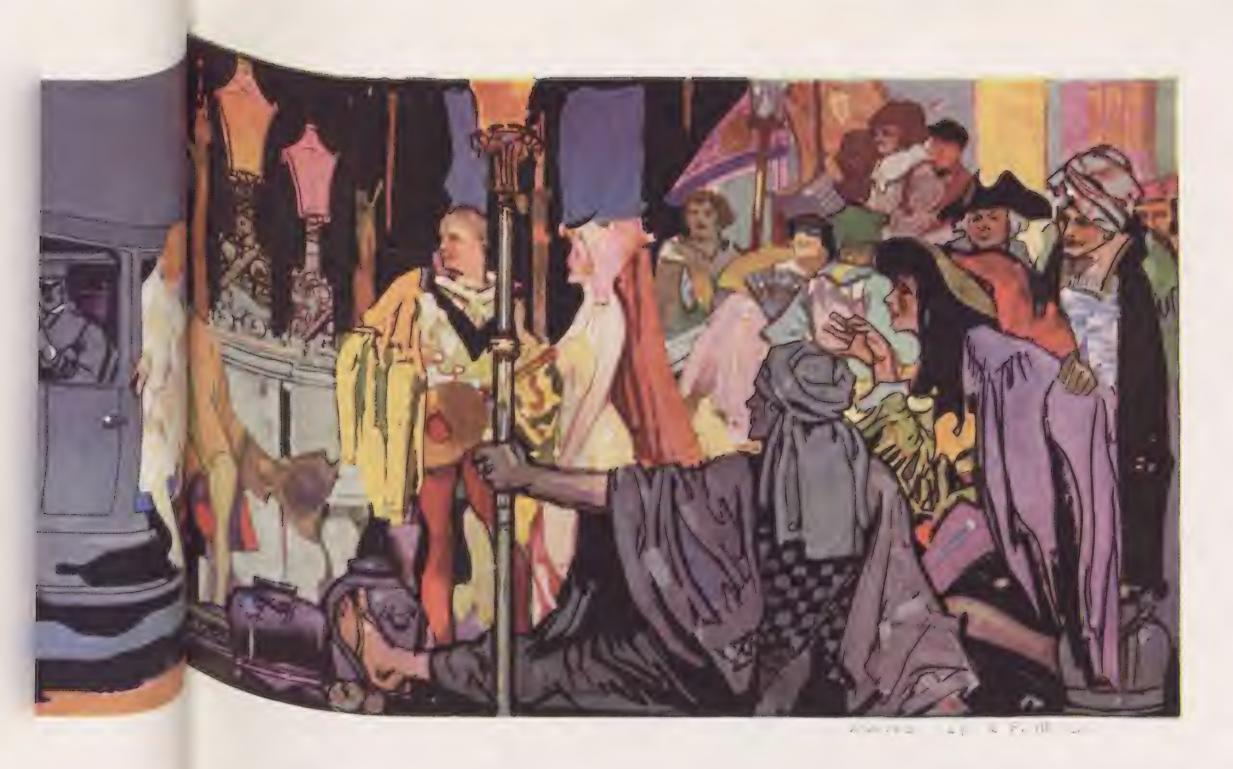
Telephone:
Gerrard 713

Telegrams: "Cegaunpaca, Piccy, London"

Packard



Service S



ggling multi abandon nic battle s perfuming clamour deep purpl mmer's night But one touch is yet wanting to complete the picture, and it is supplied by the arrival of the Queen of the Revels—not drawn, as of yore, by milk-white steeds, and attended by her court of beauty, but—as is more fitting in these ultra-modern times—the chariot of her choice is a PACKARD TWIN SIX. More fitting, because, wherever distinction counts for anything, wherever exclusiveness in personal taste is to be found, and wherever the crowning touch to any scene, however gorgeous, is lacking, the choicest of all cars, THE PACKARD TWIN SIX, supplies it.



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The
11'9 h.p.
Albert
Coupé
Model



Manufactured by Gwynnes Engineering Co., Ltd., of Chiswick, Hammersmith and Vauxhall, London.

## Another Albert Owner's Opinion

25th October, 1920

"Since leaving Gt. Portland Street I have done about 820 miles, say an average of nearly 100 miles per day, a fair test you'll agree, before passing an opinion, and the very least I can say is that I am absolutely and perfectly satisfied. In fact, I would like to place on record my serious appreciation of your firm's splendid attention and practical demonstration of the 'Service' you profess. It becomes all the more striking after the general experience of many loudly advertised 'Services,' and will not be forgotten by me. I can assure you I have already astonished a few of my friends with a narrative of your promptness and thoroughness."

Yours sincerely, (Signed) F. W. B.

### WRITE for the BOOK of the ALBERT CAR and the ALBERT SERVICE

Sole Concessionnaires: THE SERVICE MOTOR CO., LTD., "SERVICE HOUSE" Dept. O, 94 GREAT PORTLAND STREET, LONDON.

Telegrams: "Serautoco Phone, London"

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The Motor-Owner, February, 19



# The OTOR OWNIER

VOL. II.

### CONTENTS

NO. 21.

FEBRUARY, 1921.		PAGES
THE YARN MARKET, OR BUTTER CROSS, DUNSTER (Frontispiece.)  NAME DUE REFLECTION		. 2
AFTER DUE REFLECTION  ACTIONAL PETROL ECONOMY  A CONTROL OF BUTTER CROSS, DUNSTER (Frontispiece.)		. 3
1,000		. 7 /
WET WEATHER MOTORING: DRIVING THROUGH THE MUD IS MORE UNDERSANT THAN IT NE		. 10
WET WEATHER MOTORING: DRIVING THROUGH THE MUD IS MORE UNPLEASANT THAN IT NE	ED BE	
ALICE Deale. (Ittistrated.)		. 11
Nerve Strain in Motoring. By a Physician		12, 13
JWING. Dy d I Hystolati	0	. 14
Woman and the Car. By Max Maddox. (Illustrated.)	٠	. 16
"A LITTE CAR. By Lenore Maude. (Illustrated by Gladys Peto.)	•	17, 18
Is THE MILLENNIUM IN SIGHT? THE MINISTRY OF TRANSPORT'S ROAD SIGN PROPOSALS.  PEOPLE.	•	. 19
trated \ 1 THE MINISTRY OF TRANSPORT'S ROAD SIGN PROPOSALS.	(Illus	do .
		20, 21
18 YOUR TE SEE AND HEAR ABOUT. (Ithistratea.)	•	22, 23
Is Your Time Really So Valuable? By A. J. McKinney. (Illustrated.)		. 24, 25
THE 18 H.P. ESSEX: A CAR THAT ALLOWS THE DRIVER TO USE HIS OWN INDIVIDUALITY.	(Illus	
TUNBRIDGE WELLS. By Felix Rindle. (Illustrated.)  MOTORING TERMS ILLUSTRATED  THE "MOST BEAUTIFUL" PAIGE. (Illustrated.)  RUGBY FOOTBALL. By E. H. D. Sewell. (Illustrated.)		. 20
MOTORING TO WELLS. By Felix Rindle. (Illustrated.)	•	27, 28
My LOG POR TERMS ILLUSTRATED	0	. 29
THE MOST IN By Hermes	•	. 30
RUGBY ROOTBALL. By E. H. D. Sewell. (Illustrated.)	9	. 31
THE 17 5 WE H. D. Sewell. (Illustrated.)	•	32, 33
MOTOR POWER ON THE ESTATE: PROGRESSIVE METHODS IN LINCOLNSHIRE. (Illustrated.) THIS MONTH'S CARTOON: MR. LOUIS COATALEN, THE SUNBEAM'S CHIEF ENGINEER. (Illustrated.) Supplement to "The Motor Owner": "Supplement to "The Motor Owner of the Motor Ow	•	• 35-37
(Appropriate Landson Control and Control a	atea.)	. 38
Supplement to "The Motor-Owner": "Sunbeams," Mr. Louis Coatalen.		
THE MOTOR-OWNER VISITS THE ROLLS-ROYCE WORKS. (Illustrated.)		39, 40
THE MOTOR-OWNER VISITS THE ROLLS-ROYCE WORKS. (Illustrated.)  CARD THE LAST TOUCH THAT MATTERS!" (Illustrated.)		
		41, 42
		41, 42
WE HAVE TRIED: THE 11.9 H.P. A.C., THE PICCARD-PICTET, THE WOLSELEY "FIFTEEN	· ' ANT	43, 44
CARS WE HAVE TRIED: THE 11.9 H.P. A.C., THE PICCARD-PICTET, THE WOLSELEY "FIFTEEN THE STUDEBAKER" SPECIAL SIX." (Illustrated.)	· ' ANT	43, 44





(Photo. by "The Motor-Owner.")



FEBRUARY 1921

The Yarn Market, sometimes called the Butter Cross, at Dunster, Somerset, with Dunster Castle in the background.

The Editor Covent Garde Telephone Telegraphi Annual Su

Subscription Contribution of the case of los

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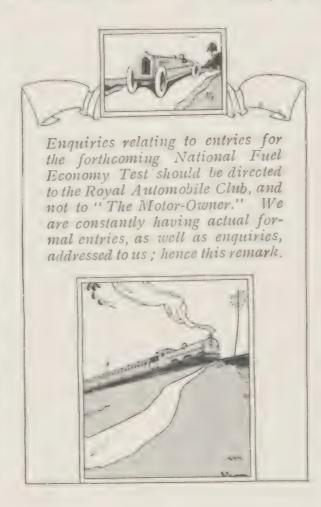
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## NATIONAL PETROL ECONOMY.

EGULAR readers of THE MOTOR-Owner will know that for some months past we have been emphasising months past we have been empared not only the need for but the possibility of economy in the use of motor fuel, and that, Valuable valuable competition Valuable prizes in an economy competition Which the Royal Automobile Club is now in the process of organising. It is hoped that this competition, which is to be held simul-

try land throughout the counciled try by throughout the company the local clubs associated with the local clubs associated the R.A.C., will render The R.A.C., will remain valuable information of the various methods of conting economy. The general shell of motoring has risen to map be point that the pastime may be even prohibitively exland the even prohibitivery in many cases. Tis no ind the price of fuel motor ind the price of a motor vehicle upkeep of a motor Vehicle to the price of food and the general cost of living; and it houst of living, have be obvious that any included be obvious that the control having for its object the must having for its object having for its object having for its object must even have also indirect but even believe national advantages. We that every motorist





—every motor vehicle user, in fact—can economise in fuel consumption without reducing the amount of work done by his car. It is now proposed that not petrol alone, but National Benzole also shall be used, and the test will be divided into two sections for that purpose, while THE MOTOR-OWNER will duplicate its prize list, so that both classes of fuel are covered.

## A NATIONAL SCANDAL.

We are informed that an order has been recently placed by the Indian Government for 500 motor car chassis with a foreign firm, and we are assured that British manufacturers have not been asked to compete. While using all moderation of thought and language, we feel that, if these facts are correct, it is a

national scandal that a Government so closely allied with ours should even contemplate placing a contract with any other than a British firm until it had given every opportunity to home manufacturers to fulfil its requirements. This transaction is complete, but we understand that similar contracts, extending over a period of years, will follow. As THE MOTOR-OWNER is a monthly publication which can take no further action until March 1st, we have placed the whole of our information at the disposal of the Daily Mail, in order that our influential contemporary may secure future recognition for the British industry.



E shall have to give up the car!

How many people have made that remark during the past few months?

Since the new taxation has become an accomplished fact, there are more people than one would imagine within the length and breadth of the land who have found that this final addition to the cost of motoring is the proverbial "last straw."

Is the position absolutely hopeless in such cases, though? Is it not possible to do something that will to some extent discount the last, legal and fatal addition to the price we have to pay for our pastime?

Assuredly there is! On almost every privately owned car it is possible to improve the petrol con-sumption—in some cases with an actual improvement in running and in others

without a serious loss of efficiency.

Technically, the carburetter setting that will give the best power result is the most efficient; the amount of fuel consumed to achieve that result is a secondary consideration. But we say that this setting, while being technically perfect, is not the one which present conditions call for.

Present conditions call for economy in every direction, for the sake of the nation as much as for that of the individual. In many cases the possibility of economising on fuel-consumption may just make the difference between being able to afford to run a car and not being able to do so.

But we must look at the matter from the national, and not necessarily our own individual, point of view. There are still people to whom a saving of a few gallons of petrol per month does not mean very much; and these are probably the people who cover the greatest mileage. We want to convince them that economy in the use of petrol —gained with no material sacrifice—is vital to the welfare of the nation, and is worth while from that point of view. It is not necessary to attempt to convince the man who has a personal, immediate stake in the question. The advantage of saving, say, 22 per cent. of his fuel bill will be obvious.

A general saving of petrol, aggregating many million gallons annually, must tend to reduce the price of fuel; more economical running on cheaper spirit will open up the pastime to many who otherwise could not afford it.

This, again, affects trade conditions immediately so far as the automobile and its allied industries are concerned; but the effect of the improvement must naturally spread, as spread the wavelets caused by a stone thrown into a pond, to other branches of national endeavour less and less directly connected with motors and motoring.

Beyond this, another even more general effect is that the decreased consumption of spirit will liberate a considerable quantity—also at a reduced price—for industrial purposes.

It is not necessary to elaborate these points. Enough has been said to show that no exaggeration is involved in the

# MOTORIST ECON( Benzole as well as Petrol Economy National French Prize III

DOUBLING

statement that the cost of living is very directly con in this matter of National Fuel Economy.

We will go so far as to say definitely that if every plant will make owner will make a serious effort to reduce his consulto the lowest result. to the lowest possible limit consistent with the work his vehicle is required to do, the price of the necessilities will be reduced also life will be reduced also.

The trouble is that possibly the majority of owners, with the best will in the world, do not know to set about obtaining economy, short of cutting in joy rides." Now, while it is obvious that the necessary use there is of motor vehicles the better not suggest this for one moment. All we desire is that all vehicles shall carry on quite normally as but that they shall not use a drop more fuel than is es

We have shown in our Brooklands tests that simple and crude a method as merely changing to carburetter jets, without touching the choke tubes other detail, it is possible to secure a large mean economy with only a very small sacrifice of the speed or hill climbing ability. Now the Royal Autol Club's National Fuel Economy Tests are to be held view to discovering the view to discovering the maximum degree of obtainable and the best means of obtaining it. will run these tests in conjunction with its Associated simultaneously all over the country; and THE OWNER, in order to supply an additional incentive owners, is offering a number of valuable prizes for

We are not at liberty to make an official statent the conditions of the tests, since this is a matter of course, entirely in the hands of the Royal Aut Club, and is now under consideration. We however, that in order to cover the various types the event will be run in classes, probably three in and that there will be a first, second and third presented by The Motor-Owner, in each class.

Further—and this is an announcement that noted with interest—it is not proposed to limit testants to the use of petrol. National Benzole be allowed, entrants having the right to specify whether are for the right to specify they prefer to use.

This, as will be seen, will have the effect of dul the number of classes—three using petrol and three benzole- and consequently the number of prizes

So far as the National Fuel Economy Test its cerned, we leave the arrangement of this in the the R.A.C. with the fullest confidence not only in lent organising ability lent organising ability of that institution, but that the Child that the Club is wide awake to the possibility necessity for economy.

In succeeding pages of this number of THE OWNER we print a selection of the views of leade automobile movement and a few extracts from general and the technical Press of the country.

There can be no doubt, judging from the electron essed, that our First Francisco. pressed, that our Fuel Economy Campaign has still PRIZE LIST.

light note. Econon: or a private or com or private or com We have concents
Automobile Club to and the most fruit and appliances conce as the most likely t Parespondents point in many less direct v example, or, as Mr. I are sufficient to give hour or more.

Proper adjustmen miding when they : mile that should be Maintenance of every lar reference to the v

These points, how yendent for succes extent, whereas we of the R.A.C. Nation definite evidence of the sphere of carburation

Finally, we would us their views o to hospitality of our to make or criticism

APPRECIATION FI take a petrol economy these days when

HE following is t announcement of In view of the I lis methods whereb s well appreciated ans the average mo djusted, in such a w utting down the function. It is true tha club is strongly of lie how very slie al increase in e indication of spirit, on which ults shown by ntly carried out at buret are worthy o ained The an average 1 and average extra t

## ECONOMISE! be allowed in the R.A.C. PRISONOMY Tests. PRIZE LIST.

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We have journalist, realises it.

Club to the literate of the Royal and have persuaded the Royal and ha Antonobile Club to do likewise, upon fuel economy as and upon the carburetter the Club to do likewise, upon fuel economy in impliance. Fruitful field; and upon the carburetter the vaporisation of the fuel appliances concerned with the vaporisation of the fuel most libely ever a secults. Several of our most likely to yield good results. Several of our fuel economy can be gained in most likely to yield good results. Several of the likely to yield good results. in many less direct ways—by the use of suitable tyres, for by coasting down hills that Manple, or, as Mr. Edge says, by coasting down hills that The more ways—by the account of the more ways—by the account to give an unaided speed of twenty miles an are not

Proper adjustment of brakes, so that they are not oint when they are the binding adjustment of brakes, so that they are no point when they are supposed to be "off" is another maint that should a needless to say, the point that should be watched; and, needless to say, the lar hance of a watched; and, needless to say, the mechanism, with particuthe same maintenance of every part of the mechanism, with particular reference of every part of the mechanism, with parties to the valves, in good order tends to the same

These Points, however, are all somewhat vague, and the human factor to a certain dependent for success upon the human factor to a certain of the whereas upon the human factor that the results extent for success upon the human factor to a certain of the whereas we feel quite confident that the results of the whereas we feel quite confident that the resumble evidence of the resumble confidence of the re Carburation of Carburations of the economical possibilities lying in the phere of the economical possibilities lying in the carburation as will amply repay those who have

Finally, we would thank those correspondents who have their views and would again tender their views on the subject, and would again tender to all who have suggestions The hospitality of our columns to all who have suggestions to offer.

THE RECIATION FROM SIR W. JOYNSON HICKS, M.P. The itention has been called to the proposal of The Motor-like the conjunction with the Royal Automobile Club to under-

the tonjunction with the Royal Automoone days when everyone is forced to economise in every

direction, motorists even perhaps more than any other section of the community are feeling the pinch.

The motor trade cannot sell new cars, and the motor-owner is using his own car much less than heretofore. Into the causes of this I will not trouble to inquire at the moment, as I have expressed my views frequently and publicly on the matter.

I am, however, delighted with the proposed petrol economy test. I wish it every success, and I should like to say on behalf of motorists in general how much we are indebted to THE MOTOR-OWNER and to the Club for making this possible.

W. Joynson Hicks.

## FROM SIR JULIAN ORDE.

In these expensive days for motorists, and the consequent need for economy by the great majority of them, apart from the fact that it is a duty to keep as much of our money in the country as we possibly can, it is believed that every driver of a motor vehicle will take an interest in the proposed Petrol Economy Tests, to be organised in the early spring, to his own direct and indirect advantage.



It is an admitted fact that it is possible for nearly every driver to save petrol, benzole, or other liquid fuel. Your readers have doubtless noted the fact that in some unofficial tests recently six cars showed an average saving in fuel of 22 per cent., the average loss in maximum speed being only two miles an hour. This satisfactory performance was the result of changing the carburetter jets for smaller ones. The alteration cost very little, but the saving in fuel was very great.

The quantity of petrol consumed yearly in this country is said to be 200 million gallons. For the purpose of comparison let us take The Club believes that it is possible to effect a general saving of at least 20 per cent. of the fuel consumption both of private cars and commercial motor vehicles. A saving of 10 per cent., or 20 million gallons at the present price, means that something between three and four million pounds would be saved annually!

Such a saving would cheapen the cost of transport, which is reflected in the cost of food and all other commodities, and it would give a stimulus to the motor industry, which employs workpeople to the number of about 500,000. J. W. ORDE.

## THE ROYAL AUTOMOBILE CLUB'S OFFICIAL ANNOUNCEMENT.

THE ROYAL AUTOMOBIA STATIONAL Fuel Economy Test:— In view of the National Fuel Economy Test: In view of the National Fuel Economy Test:—
the immediate price of motor spirit, which is still very high,
R A.C. has been considering the immediate reduction, the R.A.C. has been considering well-bods where the price of motor spirit, which is still very methods where the reduction, the R.A.C. has been considering well-bods where the reduction of the result of the price of the reduction. methods whereby fuel can be used to greater economy.

well appreciated by the man who understands his car (by the average motorist) that there are few cars which cannot the carthe rerectated by the man who desired average motorist) that there are few cars which cannot the such a way as to show considerable economy, either the fuel as increasing the air supply to the cartting down the fuel or increasing the air supply to the carectly It is true that if this scanomy is practised on an already It is true that if this economy is practised on an already adjusted that if this economy is practised on an anear, but, amount of area (a very rare thing) a certain, but slight, amount of acceleration and speed has to be sacrificed. lub is strongly of the opinion that the average motorist does callies strongly of the opinion that the average motorist decay and increase in the use of

r spirit, on which the Club desires to concentrate attention, by an independent test of six different cars results, on which the Club desires to concentrate attenuous, hown by an independent test of six different cars out at Brooklands at the request of The Motorare worthy of the Crub desired of six different care are worthy of the Brooklands at the request of The Motor-ter; worthy of the Brooklands at the request of the merely changing to smaller

are worthy of note. By merely changing to smaner the request of the small four average increase of mileage of 22 per cent. was average loss in maximum speed was only 2 m.p.h., four-fifth, seconds

With a view to getting the car-owner to interest himself in the subject and to experiment with the object of saving fuel, the Royal Automobile Club is making arrangements for a National Fuel Economy Test, to be held in the early part of the year. In order to make the test as comprehensive and its appeal as wide as possible, the Club is enlisting the co-operation of the Associated Clubs all over the country.

The intention is that on one day a series of exactly similar tests will be held in various districts. The test is purely one of economy, and, while the prime idea is to encourage the economical adjustment of an existing carburetter, any form of appliance or accessory which, being fitted to a car, achieves economy, will not be debarred from

The R.A.C. has not, of course, lost sight of the fact that by fitting an expensive accessory it might be possible to achieve a monetary economy which might be less in value than the cost of fitting the accessory, and consequently the Committee of the Club, when making the awards, will take into consideration the outlay involved in achieving the results attained.

There will be a number of prizes for the performances that are considered to be the best, and these have been generously presented by The Motor-Owner, whose Technical Editor originally suggested the scheme to the Club. Full details will be announced in due course.



### From Mr. A. R. ATKEY, M.P.

I heartily welcome the motor fuel tests to be held by the Royal Automobile Club, and congratulate THE MOTOR-OWNER on its share in bringing the scheme to fruition. It is certainly desirable that more attention should be devoted to the subject of reducing running costs.

#### From SIR HERBERT AUS-TIN, K.B.E.

I am heartily in agreement with the movement to reduce the cost of motoring.

(Sir Herbert Austin has very kindly contributed an excellent article on "The Cost of Motor-ing," which will be published in the March Motor-Owner.)

## From THE AUTOMOBILE ASSOCIATION. (MAJOR STENSON COOKE.)

I welcome any tests likely to cheapen the cost of motoring. As you know, the Automobile Association has always, and particularly during the past 18 months, been keenly interested in the cost of motor fuels, regarding it as a problem of vital national importance.

In my own case, with a prewar Talbot, I have by careful

adjustments increased the m.p.g. from 16 to 21, which means a great saving in my fuel costs. I gather that your efforts are concentrated on increasing the average ton miles per gallon of fuel, and as a motorist desirous of effecting still cheaper running, I regard your idea as sound, and wish you all success.

## From THE B.F. GOODRICH CO., LTD.

We were very much interested in the article which appeared in the January issue of THE MOTOR-OWNER dealing with the National Fuel

Economy Test.

We think it is one of the big concerns of the motor trade, and that consequently everyone at all concerned with that trade should give it consideration, and be prepared to help forward any such movement as you suggest for national economy in this direction. opinion that the idea contains great possibilities within it if it is made known throughout the length and breadth of the country, and we certainly expect an annual saving from this demonstration which will surprise the average motorist.

Wishing you all success in your endeavour.

#### From BIANCHI MOTORS, LTD.

I consider the suggestion to carry out economy tests on various types of cars worthy of hearty support, and I beg to say that I shall be only too pleased to give any assistance I can to help in this

## From SIR HARRY BRITTAIN, K.B.E.,

I was most interested to learn of the proposed economy tests which are outlined in THE MOTOR-OWNER, for in these days of excessive taxation I cannot imagine anything you could undertake which would be of more practical use and assistance to the private citizen who runs a car than expert advice as to how he can obtain further mileage on the same

amount of motor spirit. There is one additional economy which I hope will not be lost sight of, and that is the National economy, which would operate through the consumption of British-made motor spirit. We are, I am convinced, on the eve of a great development of the low-temperature carbonisation of coal, from which process considerably more benzol will be available than has been the case heretofore. If the coal consumed in the domestic hearths of this country were carbonised at low temperature, not only

## NATIONAL FU

SOME OPINIONS AND CRITICE

would a finer fuel result for burning in the same open her over 130 million gallons of British-made motor spirit available for use in British cars. What this would save way of keeping money in this country instead of sending to pay for foreign payd to pay for foreign produce needs no emphasising.

## From WILLIAM COLE & SONS, LTD.

We are very interested in your campaign, and if an in mileage of 22 per cent. with a small loss of 2 m.p.h. in speed can be obtained by speed can be obtained by every motor owner notwithstand type of car it would be a great boon to everybody in and the trade. the trade.

## From THE DAIMLER CO., LTD.

Your National Petrol Economy Campaign and the con to be organised by the Royal Automobile Club will be all who have the by all who have the true interests of the automobile moved heart.

## From DE DION BOUTON, LTD.

In the event of the R.A.C. arranging the suggested test, certainly be very pleased to give same our wholehearted

From DELAUNAY-BELLEVILLE (Mr. A. S. MAYS.S.)

I am quite in sympathy with I am quite in sympathy with your endeavour to At the same time there are two ways—as with economy other things—of looking at the matter.

To substitute smaller jets in a carburetter for existing would, in my opinion, be both an advantage and a disactorization is by no means the land of the carburation is by no means the land. Carburation is by no means the haphazard proceeding so would have us believe; and practically the whole of the putterers of good repute and practically the whole of the putterers of good repute and practically the whole of the putterers of good repute and practically the whole of the putterers of good repute and practically the whole of the putterers of good repute and practically the whole of the putter and turers of good repute make—for their own sakes, as well at the public, whom they really do study nowadays very experiments beforehand. It is not every private motorist, who can hope to improve his not every private motorist. who can hope to improve his petrol consumption by " playing on his own.

### From Mr. S. F. EDGE.

At least 10 per cent. economy in petrol consumption obtained on an ordinary journey by coasting down all will give you a speed of ac miles will give you a speed of 20 miles an hour and over.

### From CHARLES JARROTT & LETTS, LTD.

We think the scheme which you have suggested, and being considered by the R.A.C., is excellent, and can in information being obtained which will be to the in information being obtained which will be greatly to the of the trade and the private owner

If this scheme is carried out, we shall certainly make extended to participate with both the Bugatti and the Nash car-

## From THE LANCHESTER MOTOR CO., LTD.

the motoring public, if they do not actually effect an inime

direct saving in the national consum

motor fuel.

I have read of the tests recently at Brooklands at the instigation of THE Owner, and whilst you quote an case in which case in which a 22 per cent, increase was obtained by altering the jets, only of 2 miles per hour in maximul I do not think that this can possibly an average case. One can only assured before the test the carburetter was reconstructed. adjusted.

You assume that this represents which would result in an aggregate if some 40 million gallons annually the case, it is certainly an amazing fact my own experience I should not have to get an average saving of more that cent., and from cent., and from tests I have carried saving results in a reduction of maximum of 15 per cent of 15 per cent.; though I do not suffit is not possible it is not possible by experiment to economy without such a reduction in

Will not YOU help to reduce the cost of motoring, to improve trade conditions. and to make living cheaper? It is almost certainly within your power.

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## ECONOMY TEST.

FROM LEADING MEMBERS OF THE

amounting to the difference between 10 per cent. and 22 per cent. in regard to the difference between 10 per cent. and 22 per cent. The fact that there can exist a difference of opinion ing to the diff. in regard to the difference between 10 per cent. and 22 per cont. of observed economy effected, indicates the necessity for some can of observed economy effected, indicates the necessity for some can be observed. fegard to the difference between 10 pc.

can of observed and carefully conducted tests, and if the R.A.C.

turned accumulate sufficient data to enable motorists and manufaccan accumulate and carefully conducted tests, and if the restaurers to save sufficient data to enable motorists and manufacturers to save sufficient data to enable motorists and manufacturers. turers to save even less than 10 per cent. of fuel, the tests will

(We would to Mr. Lanchester that the 22 per cent. economy to was the court to Mr. Lanchester that the 22 per cent. economy We would to Mr. Lanchester that the 22 per cent. economy is solated example. If the number of cars tested had been greater with might have been different, and it is upon this point that we need to obtain valuable evilable entirely from the R.A.C. test. Our hope to with have been different, and it is upon this point with and a valuable enlightenment from the R.A.C. test. Brooklands obtain valuable enlightenment from the R.A.C. test. Our vital necessity for and basishing of economising on fuel, and to afford as suggestive vital necessity for and possibility of economising on fuel, and to afford than conclusive anidance.

We wished the results to be regarded as suggestive anidance.

The D. NAPIER & SON, LTD. The NAPIER & SON, LTD.

The Surgestion that the National Fuel Economy Tests should be specified by the National Fuel Economy Tests should be and should prove exceedingly in this The suggestion that the National Fuel Economy Tests should be still that it. I think, an excellent one, and should prove exceedingly also prove the efficiency of the "Napier" in this

have good results. We have PALMER TYRE, LTD.

We have read with interest the article published in the January atom of The Manuary at Number of The Motor-Owner under the above head, and also the iscard by the Santary of the R.A.C. concerning the statem of The Motor-Owner under the above head, and also the statement issued by the Secretary of the R.A.C. concerning the Coming lettrol economy tests

concentrate on the sold both the article and the statement seem to make on the sold both the article and the statement seem to make on the sold both the article and the statement seem to make on the sold both the article and the statement seem to sold both the sold bo employment of device the air supply to the combustion employ speaking, both the article and employment of the reduction of the sizes of carburetter jets and the complex in the effort to increase the air supply to the combustion the effort to the cost of running a car. inese, of course to reduce the cost of running a car

these, of course, are of prime importance, but you will of course the that they be represent the only methods by appreciate that they by no means represent the only methods by it is cost of running appreciably reduced. hich the cost of running a car can be appreciably reduced.

It is not so generally known as it might be that the tyres with store the car is fitted known as it might be distinct bearing on the it is not so generally known as it might be that the tyres with the car is fitted can and do have a distinct bearing on the year of an owner who reaches a considerable mileage during the the case of an owner who reaches a considerable mileage during the ht. The saving with Dalmers as against canvas tyres, is 10 per The saving with Palmers, as against canvas tyres, is 10 per

Brooklands tests have already proved right up to the hilt that a refitted with Palmer Cont. Turos save no less than 10 per cent. of r fitted with Palmer Cord Tyres save no less than 10 per cent. of the that compared with same axle loads and the same aready proved as than 10 per cent. Same the compared with any other car (with the same axle loads result 1 same presented) Catal with canvas tyres. This remarkable and the compared with any other car (with result has been downess) fitted with canvas tyres. result has been demonstrated on averages worked out on: (1) The starting one hour on set throttle; and (3) Coasting tests with Carusting one hour on set throttle; and (3) Coasting tests with

Trusting the tests which are being initiated by The Motor-From R From E. J. ROSSITER, LTD.

Referring to the National Fuel Economy est, we beg to the National Fuel Economics, we beg to state we most heartily support taps not as our experience, although las shown us great as that of many people, has shown us great as that of many people, large number of most emphatically that a very large number of people are satisfied to carry betrol their car, consuming an amount of detring quite apart from the economy apart from the economy apart from the power they obtain. of running a directly proportionate of running a car is directly proportionate which a car appeared to run quite satisfacin which We have recently carried out tests to the consumption a car appeared to run quite satisfaction excessive. A change of the jet has increase, improvement in mileage, and also an manipuper cent. improvement in mileage, and also an lational in the power and further maniputer. lation brought the power, and further manipuser, although in this case the power produced that if cent, althought the increase to nearly 100 per some slight. We believe that if some slight loss. We believe that if

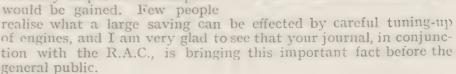
attention was given to the cars, particularly as regards the correct jets employed, the saving produced would very soon show the driver that it was worth his serious attention.

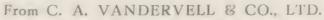
We shall be pleased to assist in any way we possibly can in this matter.

## From SHAW & KILBURN, LTD.

I am very glad to hear that at last steps are being taken to bring before the notice of the motorist the fact that an effectivesaving in petrol consumption can be obtained by a little care being taken in the adjustment of the carburetter.

There is very little doubt that the carburettors on the majority of cars, when they are delivered from the manufacturers, are adjusted to give the best results for power, no special attention being paid to the consumption of fuel. If motorists generally always kept their engines in good tune, by having their valves ground-in more frequently, tappet adjustments attended to, carburetters kept clean and properly adjusted, considerable economy in petrol consumption





The proposal seems to the writer a most excellent one.

### From WHITING, LTD.

I think The Motor-Owner is to be highly congratulated on its step towards endeavouring to encourage the potential car purchaser at the present moment. There is not the slightest doubt that in these days of high prices economical motoring is of the greatest importance to the private owner. A large number of prospective purchasers of cars at the present time are deterred from becoming motorists by reason of the fact that they are of the opinion that the expense entailed in the running of a car is almost prohibitive.

If in the course of your fuel economy campaign it can be proved to the satisfaction of the intending purchaser that motoring need not be as expensive as he imagines it to be, a very great deal can be done by this means to assist the motor industry through a somewhat difficult period.

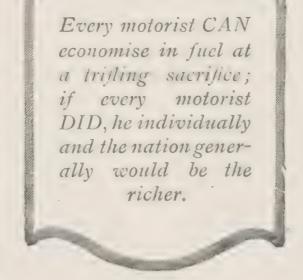
#### From THE ZENITH CARBURETTER CO., LTD.

We are pleased to note that your paper is promoting a Petrol Economy Trial for the purpose of finding out what economy in fuel consumption can be obtained by reducing

the power and speed of an engine to a certain extent.

Whilst it is an undoubted fact that the Zenith Carburetter always gives the maximum efficiency with minimum consumption, we must admit that where a client does not want absolute maximum emciency he will be able to get extraordinary economy by sacrificing a certain amount of speed and

Consequently, we consider the National Fuel Economy Test that you are inaugurating to be quite a good thing, and we hope that you will point out to your numerous readers that we are at their complete disposal for assistance and advice in tun-ing up Zenith carburetters for purposes of the trial. We shall be only too happy to loan them smaller jets, etc., and our extensive experience at their complete disposal.





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## THE MOTOR-OWNER

February, 1921

### PETROL-SAVING SCHEME.

The Times—6.1.21.

It has been computed that if all the motor vehicles in this country could effect a similar saving, the economy would represent rather more than 40,000,000 gallons of petrol per annum, or, in other words, a reduction in the price of petrol of approximately 9½d. per gallon. The Royal Automobile Club, in conjunction with THE MOTOR-OWNER, has now arranged to hold a petrol-economy competition, at which valuable prizes will be given, early in the spring.

## The Times-7.1.21.

The localising of contests will also make it possible for many owner-drivers of small cars to take part who might not have been able to get some central competing ground. The competing cars will be run on the open road and not on a track.

## A NATIONAL ECONOMY MOVEMENT.

Modern Transport—8.1.21.

It is launched under the auspices of the Royal Automobile Club, and has for its object a national effort to secure economy in the use of petrol. The appeal of The Motor-Owner is necessarily addressed to the owners of private cars throughout the kingdom, and our efforts will be similarly directed to the enormous body of carriers and traders who use motor vehicles for commercial purposes.

## OPEN TO ALL MOTORISTS.

Liverpool Journal of Commerce—6.1.21.

It is gratifying to learn that the Royal Automobile Club is about to organise a series of petrol consumption tests, with a view to finding out the best means of effecting a saving in costs. The events will be held in the spring, and will be open to al! motorists.

#### AVERAGE DRIVER WASTEFUL.

The Daily Express—5.1.21.

We are glad to see that the matter has been taken up by the Royal Automobile Club. A series of practicable consumption tests is to be made, and we anticipate that the result will show that the average driver is extremely wasteful in his use of petrol.

## TO ENCOURAGE FUEL ECONOMY.

Country Life—15.1.21.

A scheme that has been adopted by the R.A.C. at the suggestion of our contemporary, THE MOTOR-OWNER, will inevitably arouse much interest among all those car owners to whom running costs are a consideration.

## PETROL ECONOMY TESTS. Motor Commerce—8.1.21.

Any project with a reasonable likelihood of bringing us nearer the era of motoring for the moderate man will obtain the ready and keen support of the trade. . . . We think it will be agreed there is enterprise here in the right direction. The scheme has a two-fold object, in the sense that while providing a reliable test of petrol economy devices it will also concentrate public attention on the fact that running costs can be kept within a moderate margin so far as fuel consumption is concerned. Knowledge of that may check the tendency among a large number of motorists to use their cars only sparingly, and it may also encourage car purchases by people who are now dismayed by running costs.

## ON SAVING PETROL Mr. W. H. Berry, in The Car-13.1.21.

The new scheme of the Royal Automobile Club whereby motorowners throughout the country are

## FUEL ECONOMY

Remarkable Consensus of Opin ONLY

to be asked to carry out a series of independent fuel-constant tests on one day has my blessing and approval.

The advantages of carrying out all the tests on one obvious, for in this way quite a number of different caltested under widely varying conditions. One result of the tests, in any case, should be to demonstrate to Brown, getting an average of 17 m.p.g. from his 12 h.p. car, that driving the same make of vehicle, can get 22 m.p.g., corresponding disadvantages in the matter of speed and simply by careful carburatter actions. simply by careful carburetter setting and driving, and with use of special, and possibly costly, auxiliary appliances.

## THE FUEL ECONOMY PROBLEM.

Mr. J. P. Holland, in the Manchester Times-15.1 Everybody has grown so accustomed to seeing in print extravagant " and have a "extravagant," and hearing the subject discussed in all its Cleveland said, fallen into innocuous desuetude. It is all the more welcome to learn into innocuous desuetude. and tenses, that the other side of the question has, all the more welcome to learn, just when taxation threat bleed motoring white the bleed motoring white, that the Royal Automobile Club has up the matter of economy, and proposes to institute a practical tests to prove that the long-forgotten word may

## SAVING EFFECTED BY CARE.

Midland Daily Telegraph-5.1.21.

It is well appreciated by the man who understands his no means the average motorist—that there are few cars cannot be adjusted in such a way as to show considerable co either by cutting down the fuel or increasing the air supply carburetter.

of use in the English language.

### SAVING PETROL.

Sheffield Independent—6.1.21.

The Automobile Club is promoting a national petrol of competition which, if the information derived from it is applied by motor vehicle users throughout the country render possible a saving of some 40 million gallons of petrol and

## PETROL-SAVING SCHEME.

Bristol Evening News.—6.1.21.

It is a commonplace of motoring that fuel consumption scale over and beyond the proportionate amount of power

The Royal Automobile Club, in conjunction with THE OWNER, has now arranged to hold a petrol-economy comp in which valuable prizes will be given, early in the spring.

#### AUTOMOBILE TESTS.

Liverpool Post—6.1.21.

The main idea is to encourage the economic adjusting of existing carburetter, but any form of accessory will not be from the test, though its cost will not be different to the cost will not be diffe from the test, though its cost will naturally be considered junction with the results and its cost will naturally be considered junction with the results which are achieved.

## AN ECONOMY CAMPAIGN.

Liverpool Journal of Commerce—6.1.21.

That road transportation costs are high, commercial wners are only too well aware to high, commercial owners are only too well aware. It is certain, however, an appreciable reduction can be offered to the control of the control an appreciable reduction can be effected in petrol consult costs if greater economy is practised, and this without selficiency. While the greatest efficiency. While the greatest economy may be carried the the owners of the commercial vehicle, it often happens little attention is paid by the driver to this important point

## AN INTERESTING ANNOUNCEMENT.

Scotsman-6.1.21.

The announcement that the Royal Automobile promoting a great national petrol economy competition is of general interest. This competition of general interest. This competition, if the information from it is generally applied by from it is generally applied by motor vehicle users through country, should render possible a country of the information is country, should render possible a saving of some forty million

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February, 1921

## the NATION'S PRESS.

in Favour of our Fuel Campaign. DISSENTIENT!

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of the individual This result would be beneficial to the pocket individual motorist, and, in tending both to reduce the price and to liberate a considerable quantity for industrial Individual motorist, and, in tending both to reduce the price and to liberate a considerable quantity for industrial directly affect the price of food.

## PRIVATE OWNERS' PART.

The important factor, to my mind, is that private owners the country to my mind, is the private owners that the country to my mind, is the private owners that the country that if the important factor, to my mind, is that private owners that way the country are invited to give their assistance. In the trial the results attained about the more satisfactory than if the trials and experiments action to be carried out by experts, for the trials and experiments were to be carried out by experts, for both out obtain results in power, speed and petrol economy, the latter can experiments were to be carried out by experts, to both on special and standard cars, that the private owner cannot have obtain.

I have no doubt that in most cases, if the engine designer and he carburetter makes are consultation over a drawing-board, the carburetter maker went into consultation over a drawing-board, with manufacture went into consultation over a drawing-board, and the carburetter maker went into consultation over a drawing-board, with a sound guarantee in the matter of power, road-speed, and ith a sound guarantee in the matter of power, road-speed, and

## TAXATION AND POVERTY.

Sportsman—II.I.2I.

mitigated by the fall in arise of petrol owing to the repeal of the Sportsman—11.1.2.

Sportsman=11.1.2.

Sportsman—11.1.2.

Sportsman=11.1.2.

Sportsman=11. tax, but the cost of fuel is still high, and the need for economy in important as an insistent as over which fact invests with supreme this respect is as insistent as ever, which fact invests with supreme recent proposal of the R.A.C. to hold a fuel-

## AN EXCELLENT SCHEME.

The Motor News—8.1.21.

Pronghout the test is to demonstrate to the private owners ithout the country large a very little trouble and The object of Motor News—o. I...

Without the country how, by taking a very little trouble and of their any appreciable received of speed or power, the consumption Without the country how, by taking a very little trouble and be believe, originated by our contemporary, The Motor-Owner. We believe, originated by our contemporary, The Motor-Owner.

## ECONOMY TRIALS WELCOME.

Motor Transport—10.1.21.

Table further carburetter so perfectly adjusted that conscious the carburetter by reducing the carburetter by reduci rable further economy could not be effected either by reducing the jet or increasing the air supply, though it is seldom rable further economy could not be effected either by reducing to achieve a substantial account or speed that has to be sacrificed but a substantial account or for the matter of that, how few to achieve a substantial economy, or for the matter of that, how few motorists really understand their cars sufficiently to get the ost out of them for it is naturally in the interests of the private Nevertheless, ost out of them for it is naturally in the interests of the private that the R A ( is considering the matter. Nevertheless, and that the R.A.C. is considering the matter. Nevertheless, and full consequently, the that the memory of it is naturally in the matter. Nevertheress, in the stion of fuel economy is of even greater importance, and greater issues in business transport. Consequently, the ricely stion of fuel economy is of even greater importance, and districts of fuel economy tooks that the R.A.C. is organising in various sties of fuel economy is of even greater issues in business transport. Consequently, the districts will be watched by the districts will be watched by the business transport. districts will be watched with the greatest interest by the business transport.

They are community that the R.A.C. is organising in various transport community. The trials will be neither long nor costly. transport community.
They are not likely to hoped that they are not likely to occupy more than an afternoon, but it is followed up in greater detail.

## TO PROMOTE ECONOMY.

With a view to getting the car-owner to interest himself in the making to experiment with the object of saving fuel, the Club With a view to getting the car-owner to interest himself in the in the early part of the vear. In order to make the test as compressive and part of the vear. In order to make the test as compressive and part of the vear. In order to make the test as compressive and part of the vear. in the early part of the year. In order to make the test as compresention of the associated clubs all over the country.

MOTOR.

THE OPINION OF THE MOTOR.

the only "we will gladly welcome it. We regret, therefore, that constructive." Offered does not appear to fall under the onstructive." Our contemporary The Motor claims to

be "The National Motor Journal." The R.A.C. is the National Motor Organisation. It has termed these tests "National Fuel Economy Tests." And this is the comment of The Motor (January 5th, 1921):

"It seems to us that, without special precautions, the entrant who detunes his car to a thoroughly bad mileage to the gallon, and then substitutes correctly proportioned jets, will be an easy winner."

As the R.A.C. is, and has been for the last 24 years, the accepted official organisation in Britain for holding motoring tests, the comment of our contemporary is more humorous than illuminating.

In its next issue our contemporary has another illuminating paragraph: "We warn readers that, providing their carburetters are set correctly, as are the majority, etc. . . . . The official R.A.C. announcement says: "Unless this economy is practised on an already perfectly adjusted carburetter (a very rare thing) etc.
... The italics in both cases are our own. After this "warning" we were greatly relieved to see that our contemporary was taking a hand in fuel economy propaganda. On the very same page, and immediately beneath the "warning" (apparently by an unfortunate lack of co-ordination between its editorial and publishing departments) we were delighted to read the following advertisement—in large type: "Decreasing Running Costs by Carburetter Tuning, to Obtain More Miles per Gallon. See The Motor Next Wednesday

#### THE RIGHT THING.

The Auto—13.1.21.

The Royal Automobile Club, true to its tradition of doing the right thing at the earliest possible moment, is organising a national fuel-economy test to bring to light the most effective means of reducing fuel consumption of all kinds of motor vehicles.

## PETROL-SAVING TESTS.

Daily Express—5.1.21.

It is certain that considerable economy can be effected. In order to find out how much, and the best way to do it, the Royal Automobile Club has decided to organise a petrol economy test on

a large scale. The test will be held in the spring, with the co-operation of Royal Auto-mobile Club's associated clubs in various parts of the country. series of valuable prizes is offered by THE MOTOR-OWNER.

## ECONOMY IN MOTOR FUEL.

Financial News-6.1.21.

Influenced by the high price of motor spirit, the Royal Automobile Club has been considering various methods whereby fuel can be used to greater economy, and a national fuel economy test is to be held in the early part of the year. A series of exactly similar tests are to be held on the same day in various districts, and, while the prime idea is to encourage the economical adjustment existing carburetter, no form of appliance or accessory will be debarred from the test. Prizes will be offered for the best performances.

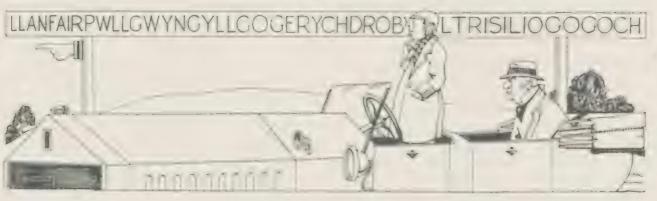
## MOTOR FUEL ECONOMY TEST.

Aberdeen Journal—6.1.21.

With a view to getting the car-owner to interest himself in the subject and to experiment with the object of saving fuel, the Royal Automobile Club is making arrangements for a national fuel economy test to be held in the early part of the vear.



GOSSIP ABOUT



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HE construing of place-names, I have read, has been reduced to a science, and so, one can conceive, has the making of sausages, though I, were I seriously put to it, should incline still to describe sausage-making as

a craft-in cases a devilish artful craft, I grant you, but none the less a craft. Equally, I am of the opinion that to have a knowledge of place-names, their meanings and derivations, would not entitle one to set one's self up as a scientist. It is not so much because I rate scientists as the table salt of the earth and philologists as the mere common brine that I am in this argument as because I am old-fashioned enough to have a due regard for reasonable terminology. Were one a grocer one would, I think, chafe at being dubbed, say, a sand merchant, not because one might deem the "trade, occupation, or profession" of a grocer above the ditto, ditto, or ditto of a sand merchant—that would be suburban, not to say pharisaical-but, rather, because confusion has an unhappy knack of getting itself worse confounded. And so, whether it be true or whether it be the merest tarradiddle to say that the philology of place-names has been reduced to a science, I do not propose, on the strength of this my "Gossip about Place-Names," hereinafter to decorate my visiting cards—even supposing I can find them—with a B.Sc. My interest in place-names is quite an informal interest, as you shall see, and hence the "Gossip" of my caption.

What first led me to Wincle was not the beckoning hills in whose deep embrace that delectable place sleeps away the centuries, but the magic of the name. There is a lyrical quality to the name Wincle, and it savours, too, of musk and lavender and other things that your grandmothers and mine, and their grandmothers before them, esteemed for their fragrance. It is Dickensian, you may say; yes, but Dickens only borrowed the name. It was on the tongues of the hill-folk of the Cheshire-Derbyshire-Staffordshire border in, one dare hazard, Canute's time, even as Puddletown may well have been on the tongues of Wessex men in Alfred's—only the scientific historians—yes, history, as well as philology, is nowadays dubbed a "science"!—spell Canute "Knut," or did so up to last week, and Alfred "Ælfred." Not that I myself mind so much, or that you who share my "gossip" are likely to be greatly perturbed over these literary antics of the pundits. It is conceivable, indeed, that we, on the contrary, may rather enjoy the antics, and that our enjoyment may deepen if, one fine day or another, the pundits, tired of monkeying with

the spelling of the names of kings too long dead to rise up in their graves in protest, take to revising our common nouns. S-p-a-d-e, for instance-will they translate it into er-er-s-h-o-v-e-l? One wonders.

SMACKING OF THE MUSE. Puddletown, the name of a place in "Dos'set

By C. S. BROOKE.

dear," is surely as delightfully old-fashion as Wincle, and equally a delight is Did bury, the name of a village too co) show anything but the tower of its chil to travellers by the pleasant way, thrown Corve Dale, from the storied town towns of Print

Ludlow to the twin towns of Bridgnorth. Wincle to have stepped straight out from one of those long fantasies that we are supposed—but, it is possible only supposed to and the line of the possible only supposed to and the line of the long fantasies that we are supposed—but, it is possible only supposed to an artist of the long fantasies that we are supposed—but, it is possible only supposed to a line of the long fantasies that we are supposed—but, it is possible only supposed. only supposed—to put behind us with other child things—dolls and rocking-horses and lollipops and sugar doodles. As thus :-

> Wee Willie Winkle runs through the town, Upstairs and downstairs in his nightgown,
> Rapping at the window, crying through the lock,
> "Are the children in their beds, for now it's eight o'clock

It is true that in my book of nursery rhymes—I no more part with it than with a certain old cookery book Winkle is given as "Winkie," but even if the book right—and to be freely held to be freely below to be freely below to be freely by right—and, to be frank, I hold it suspect—that by means dishes my assertion. Indeed, I venture further assert that Diddlebury also smacks of the Muse. for instance, that moving lay, "Diddle, diddle Dumph and so forth, likewise an epic of certain spirited escape "Hey! diddle, diddle, the cat and the fiddle" and to point my case. Unfortunately—alas! for man's versity—Diddlebury has been degraded in the verni to "Delbury." It is not a deep degradation, admitted

THE LLANFAIR FAMILY.

But, "revvonnongs ha-ha! nooze muttongs," as our in Flanders learned to say! The name of the urbane town in the Chilterns, Berk-etc.-etc., though it may be deemed a somewhat extraordinary effort in awkward and long-windedness for England, is totally eclipsed the quite common or ordinary efforts of a more and (and possibly higher) civilisation. Someday, as a contract of the contract of Victorian drawing-room ballad plaintively, but ung matically, has it—someday next summer—supposing course, there should be such a season—cross the Border; cross, too, the Hiraethogs—they are hills, there you might not suspect it. you might not suspect it—by way of the road from Abel to Llanrwst, and practise your tongue in wrapping jul round Llanfair Talhaiarn, the name of an innocent whitewashed village on the road. Then, having attain a degree of professionary and black the state of professionary and the state o a degree of proficiency, and slaked your thirst-you judge your proficiency according to the thirst—proceed a higher flight say I lanfoirmed a higher flight, say, Llanfairynghornwy, and from that

ceed to tackle what may be rated the Grand Clind teric, to wit, Llanfair—they mostly begin that —pwllgwyngyll and so on, and so on for twenty-two minutes. That place-name is so and so climacteric that even the Welsh themselved on thabitually—on weekdays at any rate. do not habitually—on weekdays, at any rate

it. They say Llanfair P.G. for short.

However, now that the

Government will have some

extra cash from increased motor taxation, perhaps we

may once again hope for dustless, mudless and grease-

Rain-obscured wind-

screens seem to be a

necessary evil. I have tried

several special preparations,

and everything else imagin-

able, from paraffin to soft

soap, and nothing will keep

the glass absolutely clear.

There was at the show a

revolving panel which threw

the obscuring raindrops off

This might

centrifugally.

less roads.

## WET WEATHER MOTORING. By ROBERT W. BEARE. Driving through the mud is more unpleasant than it need be.

YOME of us indulge in all - the - year - round motoring from choice sity; but even those who do so for pleasure have been language to use intemperate language in regard to general

But why should wet Weather motoring be so unpleasant? Let us take a and of the reasons why it is,

and pull them to pieces: I. The roads are often greasy and unsafe, and driving on them involves con-

siderable extra mental strain. 2. Rain or sleet, or even mist, render the wind-screen

paque, and consequently the driver has to get wet and cold to secure safety.

3. The car always and its occupants only too frequently are bespattered with mud.

filthy job; even pouring in a spare can of petrol is unpleasant on account of the mud, and may involve engine trouble engine trouble through water in the petrol.

At the

At the moment I can think of no other reasons; those, anyway, are the principal ones, and the ones that have been bothering me personally in the week or so preceding writing of the Writing of these lines.

In regard to point No. 1, now, probably we must blame war for the point No. 1, now, probably we must blame the war for the present atrocious state of the roads all on the way to reach a Over the present atrocious state of the roads very high country. We were well on the way to reach a making in 1914; dustless very high standard of road making in 1914; dustless

roads mean mudless roads, and no mud means no skidding.

Over two mudless roads, and no mud means no skidding. Over two years have passed since the Armistice, and one light have might be excused for thinking that by now we might have picked up the excused for thinking that by now we might have picked up the threads again at least, with a possibility wiping paid the clate in the

wiping point No. 1 off the slate in the Instead, the road at immediate future. Instead, the road through Southall, on the way from Ealing to Uxbridge, seems to be a specimen to Uxbridge, seems to be a specimen, if a bad one, of the methods that are still in force.

I have been driving up and down the Abridge been driving up and down the 1. Have been driving up and down and it has road almost daily for a year, and it has been continuously under repair all the time. In Southall the right-hand long before out from London, was finished long before—a matter of a month or so the other; when the left-hand side was moded of repair the dry weather the road was again back, the right was again back, road was a first the road was a first those of twenty road was as dusty as those of twenty Wears as dusty as those of the last few weeks it has ben a quagmire.

As regards the tramlines, they have because the tramlines, they have not been touched at all; the road is not Thite So bad as the Οδός Μοναστερίου in Salonica bad as the Οδός Μοναστερίου in sall one can say! Salonica, and that's about all one can say!



The horse of "Firmary EdleDyle" all more is a firm

answer it not too complicated for motor-car use; but I find that if a screen is suitably designed the top half may be thrown open

just sufficiently to see through without letting in an appreciable amount of "weather." To be quite ideal, however, the top pane should be divided, so that only the driver's half need be open even that little bit.

Point No. 3 is again more or less a question of road making. In present circumstances, however, if all drivers went to as much trouble not to splash other people as some I have met and one I am too modest to name, there would be less to complain of. But I have twice recently in Southall had my offside ear filled with the semi-liquid contents of that village's famous pot-holes, and am a little sore on the subject. The motorist whose car is equipped with easily fitted and closely fitting, all-enclosing side curtains is in a happy position; but here again a trouble arises in towns in the inability of the driver to signify his intention of stopping or turning right or left to other road users.

We come, then, to point No. 4, and, apart from reiterating

the necessity for mudless roads, I can think of no remedy short of carrying with one an overall and a pair of old gloves.

One should not run out of petrol on the road, perhaps; but one does. Lucky is he whose car possesses that useful little fitting which I have found of service on the Hupmobile—a small reserve tank, brought into use by merely turning a tap. Otherwise, if it is necessary to fill up in the rain, why cannot the petrol tank orifice be protected? This is one advantage of the dashboard tank with an interior filler, as on the little Standard.

Apart from the question of mud, therefore, wet weather motoring need not be unpleasant at all. I am an enthusiast, and do not expect everyone to be as I am—happy at the wheel of any old car on any old day. But as a means of getting there, no matter what the weather, give me a car every time!

the wet weather; it's the mud. Bad roadmaking methods are at the bottom of the unnecessary unpleasant-

It isn't

motoring.

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## IN MOTORLAND. With the customary apologics).

"I'm not an Innocent,"

Alice was beginning-

Ithen blushed.

In this Whimsical Narrative is described the Surprise of a Girl who "Jumped to Conclusions" as to what makes a motor-car go, exactly as You, Fair Lady, About to be Amused as you scan this page, are wont to do. Or if it so happens that you are not "one who captures by her winsome eye," but that much-to-be-congratulated person, her husband, you also will be edified. Anyhow, What Happened to Alice is worth more than the eighteen-pence you've paid for this month's "Motor-Owner.

LICE rubbed her eyes. She was standing before a peculiar-looking carriage. She had, I should tell you, just arrived from Palm Island, where everything runs on legs.

"Now I wonder what that can be?" she said in her mind, with daintily arched eyebrows. "What a funny-looking thing!" she added aloud. Then she turned about in surprise.

For a voice had snapped, "Nonsense!'

Alice bridled.

"You're very rude," she remarked, addressing the place where the sound had come from.

The Voice looked at her. It actually smiled. The smile hung in the air for quite a while before it drifted away like a wisp of Havana

As there was nobody to be seen Alice did the next best thing—she looked at herself. And really she was very pretty. She had, you must know, outstripped poor little Peter Pan. At least you thought so if you looked at her head. For she often put her hair up. But if you looked at her skirts you changed

your mind. For they were up, too, very high up. In fact, they were amazingly abbreviated.

> " But what on earth's the good of wearing three guinea silk stockings if nobody can see them?" she had asked herself at the time.

> The Voice laughed, and Alice double-bridled-from her resentful toque to her sylph-like shadow.

> "You must be one of the Innocents at Home. Pretend you don't know what a motorcar is!"

> "I'm not an Innocent," Alice was beginning. Then she "Well, of course I am, but not what you mean, anyhow," she amended, in an annoyingly crippled fashion.

"Mean!" retorted "How d'you know what I mean? How d'you know what you mean? How d'you know what a motorcar means? How d'you know-

"Well, what does a motor-car mean, then? I've ne seen one," she interrupted angrily

"But you can't say that now. I am the car." Much to her surprise Alice found herself on the drive

seat. "Now, push off," commanded: Voice at her ear. "Get a mo

"B-but how?" stammered Alice "There's no horse."

"She says 'there's no hors She says 'there's nothere are—twenty of 'em!'

Alice was startled. She made jump out. But the Voice biagain-

"Look beneath the bonnet." Alice became Dignity.

"Oh, if you're going to play the fool I'll get out."

"Silly!" came the reply There! Look! There's a moving—across the road.'

To Alice's surprise the Voice with right. A car was, indeed gliding

"B-but, how on earth—div somebody push it?" she faltered turning her board. turning her head to watch the out of sight.

"Stoopid! Somebody is pushing it—twenty horses Don't you see?" the Voice snapped angrily.

"I do not," replied Alice, "There was very clearly. nothing there."

The next she knew was that they were moving

"Why—what—how——" she was beginning, when she was interrupted.

"We'll go for a ride and, like your Talking House, defer the answer till to-morrow," grinned her invisible companion, in measured Westminster-reminiscent tones.

To-morrow arrived for once —at any rate for Alice, though she couldn't have explained how she got there.

"It's to-morrow now," she said, into the empty air.

"Ridiculous! How can it be-logically?" said the Voice.

"But you said yesterday





You'd explain 'to-morrow.' doesn't it -logically? To-morrow follows to-day,

Then you've got to the End of the World," laughed the oice, "since is To-day, all To-morrows are Voice, "You've got to the End of the World," laughed and To-day since if To-morrow is To-day, all To-morrows are isn't it?"," there you stop! That's Jevons at his best,

Alice was nonplussed. Then, after a little thought, she explained:

Well, anyhow, if it is the end of the world I'm still very much alive."

And don't know what a motor-car is!" came the taunting reply.

boldly. 'that's what you're here for,' returned Alice angrily. If I could see you I'd shake you," she added angrily, azing over her shoulder at the place the reply

An irritating cackle in front made her look round swiftly.

There, on the driver's seat, sat the Voice—all of it. You see these six round things—cylinders people who aren't sufficiently original to get rid of a two-thousand-yearold word call them. They're like jam jars—hollow. And them are them are when you pull them are smaller jam jars—pistons. When you pull the pist down the pistons the gas rushes in."

"But why?"
Why? Because you create a vacuum," came the triumphant reply.

Alice was puzzled. She put her hand to her head. " Noth: What's that?"

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Nothing! What's that.

Nothing! But how can you make nothing? What

Nothing! But how can you make it of?"

annoyed don't understand," retorted the Voice in an is just emptiness. That's why the cone. "A vacuum is just emptiness. That's why the car goes."

By a vacuum!" Alice was surprised.

Alice was it does! Of course it doesn't!" Alice was perplexed.

Perhaps you will kindly tell me what you really mean," Said in very precise tones.

Exactly what I am doing—only you're so silly. You the picture of t pull the piston down, and as the valve—this thing—is So you get emptiness. closed, no more air can get in. So you get emptiness.

Alice's object. It isn't really a vacuum, for— Alice's chin tilted, and her eyes flashed angrily.
Will chin tilted, and her eyes flashed angrily. Will you kindly explain, please, what you do mean? First you kindly explain, please, what you are live never to a vacuum, then that it's only a bit of one. I've never heard such rubbish in all my life.

The Voice chuckled. You're getting on. Nothing like puzzling people—
the piston doesn't go right up makes 'em think. You see, the piston doesn't go right up to the top of the cylinder, so there's always a little air When the piston moves down, as no fresh air can the little piston moves down, as no fresh air can '' Set in, the little bit expands and fills the cylinder, and—

after all, said Alice triumcylinder, 'You said 'fills the Again' remember."

Again her companion erinned.

Quite in order, little one. But all the same the cylinder is full the same the cylinder you knot thin air-rarefied. you know?—and so it doesn't press so hard on the cylinder's inside soes." and that's why the car

"I suppose you're right," she admitted doubtfully. "I am. But when air expands it can't press so hard, so the air outside--'

Rushes in," exclaimed Alice quickly. " And then?" "And then the piston rises and compresses it till it's

bottled up like the air in a football." "Well, what gives the power, then?" inquired Alice,

looking puzzled.

"Petrol—this stuff. The air picks up a few drops as it hurries into the engine." Seeing that Alice looked doubtful, the Voice added—"Then it is set on fire by an electric spark and expands enormously, just like steam—one foot of water makes sixteen hundred feet of steam. So you can see there's a heap of what you might call hot air pressing on the piston."

"Well, but what I don't see is how the engine turning

makes the car go. It's in it!"

"It pushes it—through the spokes of these wheels."

"I see," said Alice again, but rather doubtfully. "But how can the wheels move the car? Won't they slip?"

"No, not so long as there's enough weight on them, and the ground's not slippery. It's what they call friction that does it. It's as if you fastened the wheel to the road. And because it is held at the bottom, and the engine is pushing at its middle, the wheel has to turn. And as it turns it takes the car with it."

A sudden crash, mingled with screams and the sound of breaking glass, startled the young lady at this juncture.

"Good gracious! What on earth's that?" she exclaimed, with paling face. "What a smash! I suppose it was the speed that did it!"

"Nothing of the sort. It was the stoppage. The fool

didn't use his brakes. Lucky no one's hurt.

'Brakes! What do they do?'

"Just the opposite to the engine," said the oracle.
"They pull up the car through the wheels. The motion of a car is only got by power—that is, heat—and its stopping is exactly the same."

"The car stops by heat!" Alice was surprised.

"Nothing else. The friction of the brakes makes them hot, and the tyres too.'

"Curiouser and curiouser. But why doesn't the car

get too hot to sit in?'

"Why, the air cools it, of course. People talk of water-cooled engines. Rot! There is water round them, but it's only the half-way house. It's the air that cools the water that cools the engine."

"The air that cools the water that cools the engine," repeated Alice doubtfully. "I suppose it's all right, but --- So that's why I get hot, then. Work means

heat, and heat work.

"Course. You're nothing but a heat engine after all, and water-cooled, too. You're sweating now.'

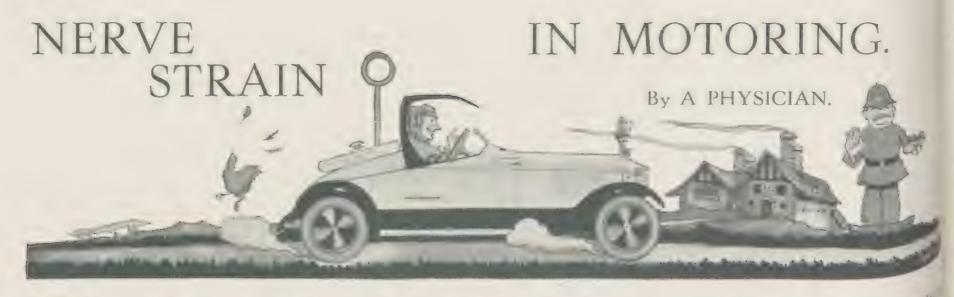
Alice sat up.

"Certainly not. Perspiring, perhaps. And, anyhow, I'm air-cooled," she retorted.

"If you're going to split infinitives I'm off," said the Voice, as it faded away.

But Alice remained—three guinea silk stockings, skirts up," and all-in Motorland, solving its mysteries by the opportune aid of the journal that is privileged to chronicle that young lady's adventures.





O say that every fresh enactment of law produces new conditions is almost a platitude. If the suggested abolition of the speed limit were brought into force motorists would find it no

exception to the rule.

The careful driver always has the safety of the public and of himself at heart and, under the proposed alteration, it will undoubtedly add greatly to his pleasure and convenience to feel that on a clear road he may open out without the fear of running into a trap. I suppose very few of us have failed, at some time, to feel the joy of conquering space by time. But the very power to be able to do so will bring with it wider responsibilities and, in an equal sense, no doubt, increased penalties for negligence.

No matter in what walk of life we may be, we all, sooner or later, find that increased responsibility produces greater strain on our powers. In the professions strain works havoc mainly on the nervous system; amongst the

labouring classes chiefly on the muscular system.

The motorist is almost singular in that he feels strain in both the nervous and the muscular systems at the same And when we inquire for the reason of this it is not so remarkable as at first sight it appears. To cope with just the ordinary emergencies of the road he must have perfect unison of action of his nerves and muscles. unison is called "co-ordination," and by it is understood, first, a rapid appreciation of an emergency, aided by former experience of the correct method of meeting it, and, secondly, the power of the muscles to perform quickly and in correct sequence such movements, fine or gross, which make up one action, such as pulling a lever.

#### REGARDING CO-ORDINATION.

The first part of co-ordination implies perfect nerve force, and the second part pure muscular action. Now a frequently recurring series of emergencies, be they great or small, produce strain-strain on co-ordination, strain on both the nervous and muscular systems of the body.

In effect strain produces fatigue and in-co-ordination. Even in the lesser degrees of want of co-ordination that wonderful and spontaneous working together of mind, nerves and muscles is interfered with. It may be that observation of an emergency is not so speedy, judgment not so rapid, or the muscular action is not performed in proper sequence, or is slowed down. No matter which of these effects results, the fact remains the same—the emergency is not met in the perfect way it should be.

Undoubtedly, in strain, we have to deal largely with the personal factor. Given two perfectly healthy men driving under the same conditions we should find a difference in the time when strain would begin to be produced. But this does not invalidate the argument that sooner or later strain results from repeated emergencies.

Accepting the fact, then, of an increase of strain result from greater responsibility, it behoves every motorist obviate strain as far as is possible. Here we must with the time factor, for, given repeated emergend every motorist sooner or later is liable to suffer.

Obviously, the first necessity for the public safety is limit the period of driving. No driver should work than eight hours, and many for less. Then we must to do away with any factors which are likely to has strain. "Remove the operation." strain. "Remove the emergencies," is an obvious answer In this connection it is gratifying to observe that held are being abolished or cut down, if slowly, at dangel corners and bends, and that the non-motoring public apl to be becoming better educated to the needs of the motor (and themselves). At any rate the rule of the road has late been better observed.

#### THE HEALTH ASPECT.

Although much might be written on this subject it not the aim of this article to do more than mention it, I wish to deal especially with the health aspect of the An important way of limiting a health aspect of the

An important way of limiting strain is to delay its of the What, then, hastens the advent of strain? Here, I this primarily should be mentioned alcoholism, because it is entirely preventable. entirely preventable. But, I do not apply the "alcoholism" solely to the heavy drinker or the frequent of the driven danger to himself and the public, but also to the driven who is quite moderate, remarkable as this attachment many who is quite moderate, remarkable as this statement appear. However, it appear. However, it may be understood by explaining that alcohol in any form is a landerstood by explaining that alcohol in any form is a drug which is volatile, therefore acts quickly, checking the natural oxidation which goes on in all the tissues of the body, including the brain, nerves and puscles. This brain, nerves and muscles. This interference leads of the defective or delayed judgment, a slowing down of the property impulses the defective of the property in th nerve-impulse to the muscles, and a lessening of muscular power.

#### THE EFFECTS OF DEFECTS.

Now that we have so many ex-soldiers on the road is important to realise that nerve strain due to shell-she neurasthenia and other affections of the nervous system predispose to an earlier onset of strain. In this class should be placed persons who have should be placed persons who have physical defects such as loss of a limb or injury to a l as loss of a limb or injury to a knee. Incapacitations as these throw stress on other as these throw stress on other parts of the body and indifference carly fatigue early.

Defective eyesight, of which there are several varietic unless corrected by using appropriate glasses, is a pote cause of strain. Amongst other causes may be conference fatigue, restricted field of vision, certain minutes allments nervous action of the horizontal conference. ailments, nervous action of the heart, and cramped scaling

accommodation.

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# SWINGS AND ROUNDABOUTS.—By I. JAMES.

There is a familiar saying that what one loses on the swings is made up on the roundabouts; but is this true in regard to downhill. Often one can more satisfactorily climb downhill and uphill in motoring? In other words, does downhill balance up? Often one can more satisfactorily climb upour an upour land uphill in motoring? of such and uphill in motoring? In other words, does downhill balance up? Often one can of such a property of the preceding descent, but the writer of this article has set out to prove that in spite of such occasional advantages, losses on the swings are not made up by gains on the roundabouts in this respect.

ILLS have always offered little problems of their own. By people like engineers they are taken seriously; others seem to think them liardly worthy of a second thought.

Grades," to use the technical term, first came into their own with the institution of the railway, and contemporary history of that period reveals to us the erroneous in property history of that period reveals to us the errors of experts that then existed respecting hills. One group be expected sasserted loudly that no locomotive could ever be experts asserted loudly that no locomotive countries pinion state then existed pinion state of climb an upgrade unless the rack-andpinion system, so popular in Switzerland to-day, was being the so popular in Switzerland to-day, was mployed. How their arguments were falsified we all adhesive proving that smooth lines are sufficiently adhesive, provided there is sufficient weight on the driving

This point settled, the next that arose was in relation waking out the line "Why not lay the line to making point settled, the next that arose was in relatively the hill a making cuttings through hills. "Why not lay the line making cuttings through hills." The hill a making cuttings through hills. "Why not lay the line making cuttings through hills." Soing up was one suggestion—" for what you lose However, experience going up, you make going down." However, experience the general hand the truth, and we have the result in the soon revealed the truth, and we have the resurcountry. Overseas this plan is not always followed to the building onto lecause making cuttings and embankment building extent, because making cuttings and embanance warrant. But a first cost that only heavy traffic can be a first cost that only heavy traffic can b warrant. But in the British Isles we have the necessary amount, and that is why so much trouble to avoid "banks" on our railways has been taken.

The railways has been taken.

motoriet has learnt his lesson, but very frequently the engineer has been taken.

In hiotorist has not. At any rate it is not uncommon a care that apart from a hilly route hind a car-owner arguing that, apart from a hilly route distances heing arguing that, apart from a may read the state of the level. distances being equal, over an alternative on the level. But what is the truth?

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Let what is the truth?

Will suppose an example and see what really occurs.

Will suppose an example and see what really occurs. We will suppose there are two routes, each a hundred miles the length of the way: the other ascends to a point midway—i.e., for a distance of fifty miles, at an angle of one in ten, falling at an equal angle for the

The car taken by way of illustration weighs one ton added, is of the car taken by way of illustration weighs one ton when going "all out," of a maximum. A the care of a maximum speed of 45 miles per hour.

To cover the hundred level miles on a clear road the car Take 2 hours 13 minutes to reach its goal. Now let us imagine that it returns by the hilly route.

The first half is uphill—a rising grade of fifty miles of one

On the trip it has to overcome three things -(a) road resistance, (b) friction in the mechanism, (c) windage. The first two apply equally on the flat and when the car is negotiating the grades. It may, therefore, be ruled out. But windage cannot, for it increases enormously with augmentation of speed.

At 45 miles an hour the wind resistance equals 9.97 lb. per sq. ft., according to accepted tables. At 20 miles an hour it drops to 1.96 lb., the proportion for this and other speeds being somewhere in the neighbourhood of the square root of the speed. Therefore, since we are assuming that the car, in spite of all these forces, is able to develop 45 m.p.h. on the level, we must make a little allowance in reckoning its speed on the hill, as the windage there is less.

When the car is ascending the up-grade it has, in addition to progressing horizontally over the distance of fifty miles, to raise itself—i.e., one ton, through a height of five miles. At what rate can it do so? The answer is given by Watts's formula:

20 h.p. = 2240 lb.  $\times x$  ft. per min.

33,000

or, the car lifts itself at the rate of 294 ft. in a minutei.e., it is travelling, since the grade is one in ten, at a speed of 2,940 ft. per minute, which equals 33.4 m.p.h.

This result is, of course, theoretical, and higher than obtains in practice, since it assumes that there are no negative forces such as the three I mentioned above. But still, let us place the figure at 30 m.p.h., which is well on the optimistic side, and see what happens.

At thirty miles an hour the car needs I hour 40 minutes to climb the fifty miles uphill. If the car is to complete the trip in the same time as it took in the other case it must do the downhill fifty miles in thirty-three minutes—i.e., at a sustained rate of ninety-one miles an hour, which is rather fast for the road, and in any event impossible for a vehicle whose maximum speed is forty-five m.p.h. And add to this the enormous windage-39.2 lb. per sq. ft., which alone entails something like 60 h.p.—and it is obvious it cannot be done.

Therefore, since the journey on the hills takes 33 mins. longer than that on the level, downhill does not make up for uphill.



## MY MASCOT.

HERE'S a lady that drives with me always

—Though she never will drive to despair,

As we know, to our rue, some enchantresses do

When we venture our fate with the fair—

Though others be coy and uncertain,

She's steadfast in shadow and shine,

Whatever the weather, we face it together,

I and this lady of mine.



This lady of mine is a Venus,
She wears what all Venuses do,
A ravishing smile—'twould surely beguile
The dullest Adonis to woo.
What else does she wear? There you have me,
Her wardrobe is scanty, I know,
But once, as we tore through a blizzard, she wore
A diaphanous mantle of snow.



A cloak without selvedge or hem,
Without even gusset. But why so discuss it?
The petticoats make not '' la femme.''
'Tis her poise on the bonnet that charms me,
Though a bonnet poise never on her,
Could she look so divine, this lady of mine,
If swaddled in chiffons or fur?

That rapturous lift of her chin,

And her hands, as you see, thrown backward
to me,
As alone through the country we spin.

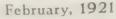
I give not a thought to her raiment,
She's steadfast through shadow and shine,
Then shall I feel scorn that no satins adorn
This white metal Mascot of mine?

No, no. 'Tis her poise that enchants me,

MAX MADDOX.

this it. A wind the thing will be a mind the wind the win

;





By LENORE MAUDE.

".... and those who are susceptible to the charms of dainty 'Undies.'"

HRISTMAS festivities, followed by the rush of the January sales, are over, and February sees the first quiet moment many of us have had for quite a while. The sales must surely have proved irresistible this year, even to the usually strong-minded, since the drop in prices has been altogether without prece-

However, now that there seems a little breathing space, it affords one a good opportunity to look round and

dent for many years.

consider the state of one's wardrobe, as well as to think out how best to make up those short lengths of material that we picked up at the sales. It is at such

leisure over virgins" have occasion to repent virgins have occasion to repent virgins. The Purchases for which they have absolutely no rather a difficult demi-saison that needs till the next few weeks form rather a difficult demi-saison can embark on a spring outfit, that needs tiding over before we can embark on a spring outfit, since it is well known that extreme styles are often launched as "feelers" in advance of the more moderate counsels that Subsequently prevail. It is for an indication of these more moderate counsels that many women prefer to wait. In the meantimestate renovations, which in the meantime, what about those renovations, which in day, day, what about those renovations? In my the meantime, what about those renovations, who wandering lew women can afford to ignore? In my standering, I would be a find in this direction, Winderings I recently made rather a find in this direction,

dress allowance "girl.

Church Street (I have forgotten

It was allowance "girl.

e number Half-way up Church Street (I have forgotten Lennox, a small the number) that I discovered Susanne Lennox, a small establishment that I discovered Susanne Lennox, a smanufacture that is a veritable home of Aladdin for the manufacture of new frocks from old, transforming the Dust season's frocks with amazing ingenuity. Since it is sometimes said of women that we economise in one direction merely for the source of th merely for the luxury of being extravagant in another, be ordered worth while mentioning here that jumpers can this little atelier, and those be ordered to measurement at this little atelier, and those Who are susceptible to the charm of dainty "undies" Will find susceptible to the charm of damty Chine much to attract them in some of the soft crêpe de like shown to them.

Chine much to attract them in some of the Rumour that will be readily shown to them. Rumour as usual is very diverse as to the styles that will this prevail this spring. We hear prophecies of longer skirts, wide on spring. We hear prophecies of longer skirts, in his influence, already indicated in the coins; of the Spanish influence, already indicated in the coiffure beloved of the moment; and of the Oriental and the suggested by the bright coloured beads and embroidery and the gorgeous head dresses that are still a veritable for sorgeous head dresses that are still a ways led to craze for gorgeous head dresses that are still a verification for evening wear. Personally, I am always led to regard such crazes with suspicion—it is the very popularity of a style that usually numbers its days with the fastidious

woman, and being feminine it is not unlikely that in a little while we will swing in the opposite direction and prefer smooth waves of hair dressed with a marked

simplicity and guiltless of all ornaments.

For individuality, coupled with a wise moderation, the gowns at Madame Eve Valère, of Knightsbridge, are noted, and I was fortunate to obtain from so reliable a quarter some hints as to what may be looked for among the best spring models. For day wear, on our demure navy serge frocks, we shall revel in silk embroideries of gay Oriental design and colouring, introduced in panels and strips, detracting in no way from the dignified simplicity of our outline, but adding just that touch of brightness for which we so inevitably long in these last days of winter weather. Another pleasure in store for us, Madame assured me, is the coat and skirt of plaid! Truly a nightmare to the unskilful tailor, but a triumph of smartness for the artist's hand—and on the right figure! With these costumes we shall remain faithful to the high collars that have been so cosy and becoming during the cold winter months, while long sleeves will be the order of the day.

As to our umbrellas—trifles if you will, but by no means lacking in practical value as well as sartorial importance they will have carved heads of dogs and other animals for the handles. Will the really devoted owner immortalise her beloved "Chin Chin" by this means, I wonder?

Our evening garments are to be more fragile than ever— I saw some exquisite examples at these tasteful Knightsbridge showrooms. Veritable garments for Columbine were the models of georgette or tulle or lace, with petal-like layers superimposed over the fragile foundation, giving a cobweb lightness to the skirt, while the little corsage remained severe and undecorated, suggestive of an almost puritanical youthfulness.

A hint from Madame Kosky, of Sloane Street, is to the effect that some of the most attractive hats this spring will be made of crêpe de Chine, in all the delightful shades and colours to which this material lends itself so readily. They will be light, fitting well on to the head and mounted in such a manner as to be rather pliable; almost reminiscent of our favourite pull-on felts and velours, only cooler and lighter for the warmer days. In addition, it is

prophesied that as the spring progresses we shall have embroidered satin hats to wear with satin coats for smart functions.

On the whole it is probable that we shall remain constant to the scalloped and irregular hem, in its various manifestations, as also to the long-waisted effects and comparatively short skirts. It is, however, interesting to speculate on the fortunes of the high collar when the cold weather disappears. While undoubtedly there has been, and probably always will be, a number of women who adhere in blind obedience to the dictates of fashion, the development of feminine interest and responsibility in the more serious affairs of social and political life, has caused women as a whole to become far less docile to such dictates if they find them irksome and inconvenient to a strenuous business or public life. The persistent and deserved popularity of that delightful garment the "rest gown" is surely a convincing testimony that women are determined to dress comfortably and have washed the expression il faut souffrir pour être belle out of their commandments. These slip-on frocks are too comfortable to be dispensed with, and inevitably the demand creates a supply, while most of us have long since ceased to take seriously the threat of such inconvenient fashions as crinolines which are held out to us by extremist designers from time to time. The freedom of the feminine mind in other matters has certainly brought

with it a refreshing and individual





at almost all the principal outfitters. In this raw treacherous climate of ours, many women envy fortunate sisters who can wear linon or silk without tracting rheumatism or a red nose; but not being so constituted it is nevertheless depressing to have to to unromantic woven woolly garments that look even attentuated and uninspiring than ever after a few remains with the laundred. The with the laundry! The little Shetland garments, policy and clouder that the light and slender that they could be washed out at he as easily as a pair of silk stockings.

But, after all, when we come to consider the dressing as a whole, it must for ever be the little that count; the small touches that denote the individual of the wearer, and without which the most expc clothing presents a dull and uninteresting ensemble. times a busy woman will offer the excuse that she but the money or leisure for that sort of thing "; need not take sith need not take either a great deal of time, or even come expensive, if she would only think a little when making purchases. For instance, that particular shade of petticoat will certainly look charming with a certain that she has in mind, but then she may sometimes in it with her blue frock also. The two colours will nothing to say to one and nothing to say to one another; but a soft tone of would harmonise with both, and can easily be both in shoes and stockings to match.

For such a woman I would recommend the practice particularly busy friend of mine who seriously refits wardrobe twice a year. She decides on a definite scheme, to which, in its various shades, she adheres state for the time being, and it is due largely to this, I feel that she is always so well that she is always so well the largely to this, I feel that she is always so well the largely to this, I feel that she is always so well the largely to this the she is always so well the largely to this the she is always so well the largely to this the she is always so well the largely to this the she is always so well the largely to this the she is always so well the largely that the she is always so well the largely to this the she is always so well the largely that the she is always so well the largely to this the she is always so well the largely the she is always so well that she is always so well turned out. Never has she worry whether anything will "match"; she has very clothes, but they are always for clothes, but they are always of first rate cut; more she has only to devote her attention to them twice.

For a woman who follows a really strenuous and excareer this arrangement has many advantages. to whom the art of dressing is a part of their social existing or even a matter of business, it is, of course, different though it takes "all sorts"—whether it be of the manking to making the marking to manking the marking the ma or mankind—to make a world, there are few under

latter category who can afford neglect the consideration appearance.

to whom the art of dressing is a part of their social existence.



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OST things appear to have two points of View. Certain clever people can even find a third. Is motoring the single exception? One would think so it is perhaps is held to be representative. One would think so if the attitude of certain

Perhaps is held to be representative.

hakespear these transgressors have never read William that devoid of cognisance Shakespeare; it may even be that, devoid of cognisance hard; it may even be that, devoid of cognisance of the bard's it may even be that, devoid or cosmon able inabile intuitive psychology, they possess a lamentable inability to discriminate between the objective and the subjective to discriminate between the objective and they are Burns's infelicitous the Subjective to discriminate between the objective individual. In other words, they are Burns's infelicitous individual revivified—the person who lacks the gift to Very disc through the eyes of another.

Very difficult is it to realise the onlooker's point of the the equivalent the equivalent to and referee combined, and, That versatile gentleman is usually accounted the equivalent of umpire and referee combined, and, billing of the combined of t his cynostre displays a fluent loquacity when

his outspoken, he displays a much.

The outspoken is the motorist.

The outspoken is the motorist.

The outspoken is the motorist on two aspects.

The outspoken is the motorist on two aspects.

The outspoken is the motorist on two aspects.

The outspoken is the motorist of the outspoken is the ou The even motoring can be studied from two aspects man in the car has one peculiarly his own, definite, at least so he would tell you. How coven reasonable —at least so he would tell you.

How comes it about, then, that other selfrespecting citizens, who may claim equal enlightennent, adopt a different attitude—even to the point For the aspersions on the Knight of the Road? For the solution we must delve into that famous But here we find a or the solution we must delve into that rained a field and human nature. But here we find a hard field and types of the genus homo, and there are so many types of the genus

homo, and there are so many type.

Rreat the variety of influences is weigh our great the variety of innue.

Index indicates that we must weigh our Words judicially when propounding a

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The Point at issue, bald, clear, undeniable, is plain. The man in the car, least least is plain. The man in the car, at least is plain. The man in the clined to his critic, is inthat term ape the Juggernaut. Or, if that term is infelicitous, he is insufficiently constitutions who, ciently is infelicitous, he is misconstances, or by force of circumstances, the most antique locomotion-Between the two there is, to Between the two therese, a two-thousand-year-old phrase,

offeat gulf fixed."

One cannot deny that the critic reason to deny that the critic has reason for his strictures. Let us turn back a chapter in modern -very modern de chapter in modern ver informatively. As the pages rustle limblin we visualise Mr. Josiah de chapter in modern ver informatively. As the pages rustle limblin de chapter in modern ver informatively. As the pages rustle limblin de chapter in modern ver informatively. As the pages rustle limblin de chapter in modern ver informatively de chapter informative in implim to select a name at random. by that most potent instigator,

petticoated partner, he takes to himself a car. An unblemished record

is his—income returns faithfully rendered; unknown by sight at Bow Street; a churchwarden, J.P., and ruled by his youngest daughter.

Into this happy coterie introduce a car. As a chemist would tell you, a "foreign body" interposed in a quiescent congeries may cause unexpected and complex reactions. Our backward chapter states this truth anew. Mr. Josiah Timpkins, snugly ensconced behind the steering wheel, flutters his wings. It is true he was unaware he possessed them—but in man lie many unsuspected potentialities. Anyhow they flutter and dangerously, upon occasion.

Our citizen feels himself a god-lord of the highway, master of space and time, Pegasus re-incarnate. Intoxicated with the sense of power he becomes oblivious of the humble pedestrian: not willingly, but rather as the outcome of unusual circumstances. Nevertheless the result of his lack of consideration, though not so visible, is yet as real as the freely spattered, wrath-inducing mud on the skirts of Chloe.

But enthrone the indignant damsel, lugubriously survey-

ing her uninvited decorations, on the yielding automobile upholstery, and; alas! poor human nature, even her fluency takes on a new hue. For condemnation she offers praise; obloquy yields to gratification. She is the same as before—yet changed insidiously.

Circumstances alter people, it is evident.

Hence, then, the reason for the motorist's alleged inconsideration. The change is subtle, and therefore to be guarded against. "Put yourself in his place," as your car comes humming along the muddy road. It is you who, in the form of the hedge-seeking wayfarer, is desirous of filth-avoidance; you, alarmed by the unwelcome, unexpected onrush of an aggressive car.

Be your quarterings never so enviable, your genealogy anticipating Adam, there is a place, if not in the sun, at any rate on mother earth, for even the man who is wealthy because he will not own a car. Or he may have attained the height that gives him governance of a horse, yet still is he quick to resent thoughtlessness. For it is seldom more —merely a lack of that virtue, quoted as the title, which makes us "wondrous kind." Let us not abuse our new powers. A momentary slackening of speed matters little.

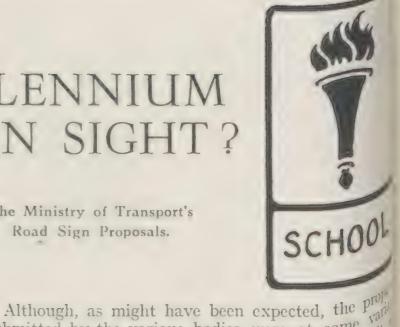


Mr. Looker is better known in the Midlands and North than perhaps among the London members of the

Trade. His name has always been closely associated with the interests of motoring in and around Cottonopolis.



The Ministry of Transport's Road Sign Proposals.



E seem to have waited long for those perfect roads which we all desire, and for which we have all paid much good, red gold-or paper, if strict literal accuracy be insisted We have waited; and in the meantime the roads in general have arrived at a state which is undoubtedly worse than it has been any time these last twenty years. But is it not possible that this waiting has been good

are recommended with confidence to highway author adoption as likely to for adoption as likely to meet with the general applied the material applied to the material applied t of the motoring community. The fundamental principle underlying the pro

submitted by the various bodies were at some

in principle and detail, by careful comparison possible to arrive at certain suggestions which could advantage be embedied in the

advantage be embodied in the general recommendation

the expert Committee, and the proposals as now apl



The neighbourhood of a

school is one of the most

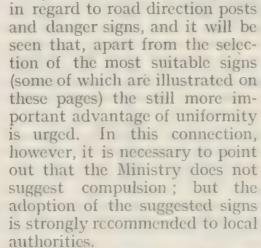
dangerous places on the roads.

These signs are clear, and satisfactorily indicate the nature of the danger to be apprehended. They have the further good point that they convey their meaning to the stranger to our shores, even though he may not be able to read English.

for us-that the responsible authority, instead of embarking upon half-hearted, unproved schemes of reconstruction, has allowed the roads to fall still further into disrepair the while it cogi-

tated upon and evolved a fully fledged, all-embracing and thoroughly practical plan for the regeneration of the highways? It seems just possible, and, anyway, the Ministry is entitled to the benefit of the doubt.

We have before us that which may be an earnest of future intentions—the Ministry of Transport's proposals



It will be noted, too, that an endeavour has been made to satisfy everyone concerned.



is the provision of clear and legible instructions and ings to motorists and road users generally, easily ded able and clear of outline, to which road traffic would short space of time be quickly responsive. Standard

notices of this character would be the only ones necessary There is at present a very considerable diversity in posts and signs used in various parts of the Country Automobile Clubs have for

Automobile Clubs have freely distributed signs of their own design and colouring; local authorities in some cases have done likewise; while owners of property next to the road have erected signs somewhat similar to the club signs in their hedgebanks to guard their carriage

Uniformity, both as regards the type of warning and the mode of erection of posts and signs, should be aimed at, as it is clear that less strain is put upon the driver when he has to deal only with uniform types of warn-This must ings or directions.



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February, 1921





in the greater convenience and safety of the travelling public.

The tendency to disregard road warning signs arises in the tendency to disregard road warming of in the tendency to disregard road warming of the tendency to disregar in the number and variety of private and unofficial signs The dimmercial notices placed on roads.

The character of the road information which it is desirable to present to the travelling public, continues the official statement statement, may be classified as follows:

(A) Road Direction Posts:

(B) Warning Signs and Notices;

(C) Village and Place Signs.

(A) ROAD DIRECTION POSTS.—In the proposals certain definite principles are laid down in receiving of arms, in regard to height, colour, position of arms,

inscriptions, etc., of direction posts.

As is generally known, the classification by the Min. the Ministry of Transport of the main roads in the Completion. Roads the country is approaching completion. Roads will be try is approaching completion. It forms part will be given route numbers. It forms part of the given route numbers. It directs proposals with regard to the standard direction posts that the route numbers should be shown on the arms of the posts, a First Class road being indicated by a black letter A, and the route number on a white ground, and a Second Class road by a white letter B and the route number on a black ground. Clear indi-



cations of this kind on the direction posts, showing the main roads in the country, will prove of great service to motorists. By this means they will know directly whether they are following the route which they had planned out or have turned off it and are running on a road which is neither First nor Second Class.

(B) WARNING SIGNS AND NOTICES.— It is proposed that the existing signs for speed limits and prohibition should be retained. The red triangular danger sign should also be used, but the special danger to be guarded against will be indicated by means of a clear and legible symbol, based as far as possible on the accepted interna-

tional symbols, upon a plate 12 inches wide and 21 inches high, to be attached to the post below the triangular "Danger Sign."

The symbol will be regarded as the principal means of indicating the nature of the danger to be guarded against.

The dangers to be notified in this manner by distinctive symbols are: School

Level Crossing Cross Roads Corner Double Corner Steep Hill.

It is not considered necessary that danger signs should be erected at cross roads and junctions which are in visible positions and marked by direction posts, nor that the approaches to towns or villages should be marked by danger signs. Such inhabited places are a sufficient indication in themselves that special care is necessary.

(C) VILLAGE AND PLACE-NAME SIGNS.—It is considered that it would be a great convenience to the travelling public if notices were erected on the main approaches to towns and villages, giving the names of such towns or villages. Standard name plates are therefore recommended to the Highway Authorities for adoption where necessary.



The level crossing situated just out of sight round a slight curve on an otherwise fast road, is really dangerous, and the warning sign should be exected well in advance.



Keen followers of the hounds who ride in a sensible manner—Miss Dixon and Miss Cartridge at a meet of the Worcestershire Foxhounds at Elmley Lovett.

## PEOPLE WE SEE

Britain is never more British than during those winter months when the country and its various sports monopolise most of our time. Hunting men and women, football enthusiasts and



Mr. Groom and Mr. Oscar Asche watch a course at a meeting of the Hockwold and Feltwell Coursing Club.





age 23

February, 1921

## AND HEAR ABOUT.

others had something of a fright earlier in the season when King Frost threatened to take charge. But plenty of nice soft weather followed and dashed the hopes of the skaters!



Lady Chesham and Major Clarke at the recent United Hunts ball at Banbury.



Mr. Astor Jones, the Master of the Worcestershire Foxhounds, at a recent meet at Elmley Lovett.







## IS YOUR TIME REALLY SO VALUABLE?

By A. J. McKINNEY.

"More haste, less speed," an honoured Victorian maxim, requires amending in these automobilious days. Far more in consonance with the facts is it to modify it thus: "More haste, less money." For certain kinds of time-saving will tax the motorist surprisingly. To this general statement we will add definite illustrations abstractions never did teach. Since the modern tendency is to educate via the eye, we have much pleasure in presenting a hitherto unreleased film. It has not passed the Censor-that official would appear to possess a value that is somewhat debatable. The drama is entitled:

#### THE ILLS OF HASTE.

Dramatis Personæ: Mr. Average Motorist, a Packrollanch car, both very much in the limelight, and, suitably repressed, a docile wife in the background.

crawls into it.)

#### ACT I.—THE PREPARATIONS.

SPASM I.—AT HOME.

[Mr. A. M., in an armchair in his drawing-room at Hampstead. Usual stage effects, not forgetting the Tantalus—this is most important. He is dictating business letters. Time,

MR. A. M. (shortly): "Daisy! Daisy! Where on earth are you? Aren't you ready yet? Why the dickens have women got so little time-sense? (His wife enters.) Oh, there you are! We arranged to start at 10, and now it'sit's nearly half-past! We'll have to travel like hell, or we'll never get to Brighton in time for dinner. Come along, do. My time is worth £2 per hour."

(Bounces out of the room, his other half following him

meekly. She speaks.)

"One minute, dear. I've been waiting so long that another minute won't matter. I've forgotten your flask."
MR. A. M. (spluttering): !!!!!

### SPASM II.—NEARLY OFF.

(Much struggling with luggage, which consists mainly of

hat-boxes.)

MR. A. M. (more shortly): "Confound all this baggage! Eleven trunks full of fal-lals you can't possibly wear. It's a three-day trip we're going for—not three years! And I can manage with one bag. Why, it's 10.31 now. It'll be dark before we reach Crawley. There isn't a dressing-bag or a suit-case or a reticule or—or a wrap you've forgotten, is there? If so, I'll wait for it. Don't mind me; I'm only a husband!'

MRS. A. M. (a faded tear in one eye, follows him into the car.) "But, Josiah, dear, I---" (Her speech is interrupted as the car dashes violently forward.)

#### ACT II.—THE OPEN ROAD.

(The average sort of Transport Minister road. A few trees, and the usual People Who Have Only Your Business to Mind.)

#### SPASM I.—A TEN-MILE LIMIT.

MRS. A. M. (laying her gloved hand lightly on her husband's arm): "Dear, do take care. We're in a speed limit. We're not in a desperate hurry. It is only eleven by that church. You know Wilkins warned us the police-

MR. A. M. (very much more shortly): "Eleven be blowed. It's II.02. Can't you women use your eyes? What the—? Dash! (as a police constable holds up his hand). Trapped!"

(A very unwifely smile disports itself behind the lady's veil. Heroically her lips restrain a very femininely fluent verbal cascade. It deepens as the P.C. enters the charge in his notebook.)

MR. A. M. (morosely): "Forty bob and costs, I suppose —and a whole blessed day wasted at the courts. And all

because we started late. Next time we go for a trip-il I've any money left-I'll arrange to start (with heav! sarcasm) at nine. Then perhaps we'll manage, with " great effort, to be on the road in time."

SPASM II.—THE LITTLE MORE, AND HOW MUCH IT IS! (Same old scene, but an even more Government-fathere.) road, and still more People Who Have Only, etc., etc., etc.) MR. A. M. (anxiously): "What the devil's that squeak? Something wrong somewhere." (Stops and alights. Pulls up floor boards. Swears as he hurriedly withdraws his hand from the universal joint.) "Confound it! Universal joint bearings gone! And I greased it only a fortnight ago. Ought to have done it before we started, I suppose. Well, we can't go on like this. Oh, there's a garage." we can't go on like this. Oh, there's a garage.'

## ACT III.—ON THE ROAD AND OFF IT. SPASM I.—THE GARAGE EVERYBODY KNOWS.

MR. A. M. (with the bill in his hand. Expostulates): "What! Five pounds fifteen and ninepence for a universal! One you had in stock, too! Only took you an hour; It's a dashed fraud. I refuse to pay. There's my card. (Drives off suddenly.)

SPASM II.—STILL THE "IMPROVED" M. OF T. HIGHWAY. ONE CAT AND EIGHT DOGS, AND CROWDS AND CROWDS OF PEOPLE WHO HAVE ONLY, ETC., ETC., AND ETC.

THE DOCILE LADY (anxiously): "Isn't there something funny about the car, Josiah? She's jerking and spitting like a cat.'

HER LORD (morosely): "Wondered how long it'd take you to notice. (Gets out angrily. Takes, off top of carburetter. Petrol spurts up.) " --! Don't run with a nearly flat tyre because you "haven't got time" to pump it up. It will cost you pounds and perhaps a serious delay.



SPASM III.—FEED THE BRUIE:

Open for a place to lunch. It's gone one." (Slows up at this'll do." The Heroine (firmly): "No, Josiah. That won't do. forward.) "It's dirty curtains. I —" (Car bounds angrily)

e'll stop l. (authoritatively): "Well, this looks all right. We'll stop here. What! No garage! Call this a civilised

(They stop at a fourth-rate country inn. Both very hungry and cross.) M<sub>R</sub> A. M.: "It's here or nowhere. No, I don't care a Why didn't you look up an dimn if the tablecloth is dirty! Why didn't you look up an Rot! Why Too busy! Couldn't spare the time! Rot! beforehand? Too busy! Couldn't spare the wouldn't by can't you be methodical like I am? It Why can't you be me...

MR. A. M. (scowling): "Dash! A blooming tyre gone, (After lunch they find a tyre flat.) Brighton tibe churned into ribbons! We won't get to Brighton till the day after to-morrow at this rate."

breakfast the (meekly): "Well, dear, I reminded you at breakfast this morning that it was leaky and wanted pumping up, and you said— MR. A. M.: "Hell!"

MRS. A. M. (fervently): "You did!" (They A. M. (fervently): "You did!" (They proceed after an hour's delay. Stopped by a police

P.C. (getting out note-book): "Number plate's dirty. Name and address, please.'

MR. A. M. (angrily): "It isn't! It wasn't yesterday, anyhow. What blessed rot! The plate's there, isn't it? Why the dickens don't you keep these rotten roads clean?" (Drives off.)

## ACT IV.—WHAT NONE OF US LIKE, BUT WHAT WE ALL GET—THE BILL.

Time Saved. mins. Money Lost. & s. d.

TIME-SAVING. BALANCE SHEET.

(a) Neglecting to lubricate 20	(a) New universal joint 3 15 9
(47 6 6	Fitting and delay 2 7 6
	Subsequent police
	court proceedings 12 0 0
(b) In ten-mile limit I	(b) Fine for excessive
• •	speed 2 II 0
(c) Not turning petrol off	(c) Loss of petrol o o 6
while inspecting car-	Loss of time o 7 6
hurottor 1	

Some people are always in such a hurry that they habitually overrun the turning and have to waste time in reversing back to the fork.



	Time Saved. mins.	Money Lost. f. s. d.
(d)	Not arranging where to	(d) Time lost (1h. 40m.) 3 6 8
	lunch 5	Headache pills,
		drinks, etc o 10 0
(e)	Omitting to pump up	(c) New tube, time 2 10 0
	tyre 10	
(f)	Not cleaning number	(f) Fine and loss of
	plates 13	time 8 10 6
	Gain 38 mins.	Loss£35 19 11

Epilogue.—It doesn't always pay to hurry. There is such a thing as expensive time-saving. Many people pride themselves on saving time when the real fact is they are shirking work on the car. Modern cars need little attention, luckily, but they can't do without that little.

N.B.—The drama is not vet concluded. For the next instalment look into your own future—you who put off to-day's work till the day after to-morrow.)



February, 1921

## WHAT WE THINK OF THE ESSEX.

## A Car which allows the Driver to use his Individuality.

NE really wonders, after a long run in such a car as the Essex, why some people insist upon having six or more cylinders to their engines, for the four of this car not only provide plenty of power for the purpose in hand, but provide it unobtrusively; and a greater multiplicity of cylinders could not do-



The Lake Vyrnwy Hotel and . . .

more. It is natural, perhaps, to compare the Essex with its stable companion, the Hudson, the former having four and the latter six cylinders; and, really, there is very little to choose between the two cars. The Hudson is the more powerful and, doubtless, under a scientific test, slightly more smooth-running, but the Essex is no mean performer in either respect.

It is as essentially a no-trouble car as the Hudson; further depression of the throttle pedal flattens out anything but a precipice on both. Both, likewise, are interesting to drive, since the driver, an he choose, can put a little individuality into his driving. One regrets that nowadays one has nothing to do but steer; it is a mark of progress, but still one has a sneaking fancy that motoring was much more interesting in the days when the driver's pocket contained his tool-kit ready for immediate and frequent use, and when satisfactory hill-climbing was as much a matter of human skill as mechanical efficiency.

On both the Hudson and the Essex, however, the gentlemanly fellow can lean back and steer with his finger and thumb, and call that driving; or the motorist of fiddling propensities can fiddle to his heart's content. The mixture regulator and the radiator-shutter control-lever are handy, and intelligent use of either or both will make a marked difference not only in the car's performance, but in their consumption.

Thus the Essex is a thoroughly all-round car. It is a distinctly docile vehicle when docility is preferred; or it can produce the most sporting characteristics that anyone could require. There was just one thing we didn't altogether like about it, and even that we are forced to admit was, from some points of view, a good and up-to-date feature; was, moreover, a matter of purely personal

tastes. This was the fact that glare-dispersing local constituted the headlamp glasses. The result was a light without any "bite" to it, so to speak—just end illumination, in fact, to drive by, and none to Having stepped straight out of the driving seat of carrying a pair of young searchlights, this was a embarrassing; but we must admit that many would number this with the many other good points of Essex.

One takes the electrical equipment for granted of American car, and it is safe to do so with the Essex institution. The starter works unfailingly, and seemingly power enough to propel the car, while the lamps are all there when wanted. As is usual with American electrolyments, it looks after itself; if the battery could arranged to maintain its own electrolyte level, the system would be completely self-supporting!

There is a feeling of substantiality about the Essex is satisfying, although one knows from her performance that she cannot be a heavy car in proportion to her possible. And there is a frank serviceability in her lines gives an impression of efficiency—an impression is more than supported by the car's behaviour

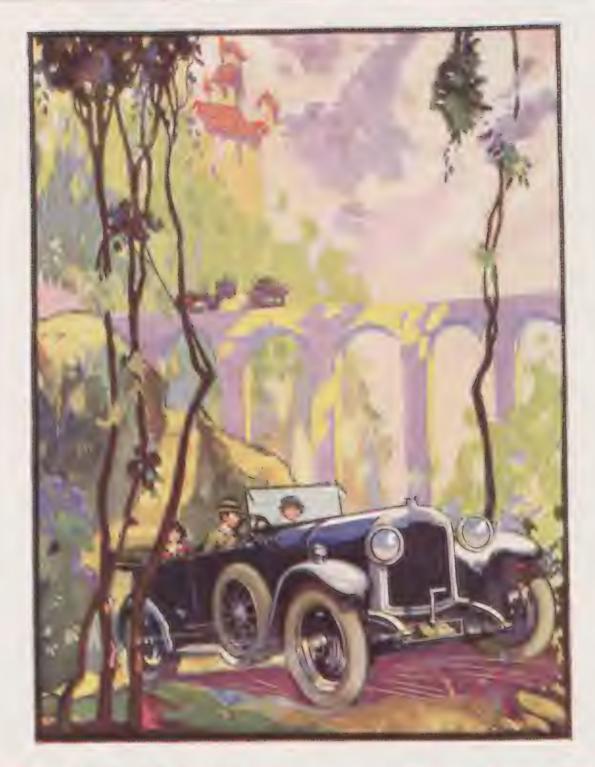
We should like to be able to say how easy is the schange; it doubtless is easy, but as we didn't have to



. . . an 18 h.p. Essex ready to take you there.

it on one single occasion after leaving the Wardour Strange we know nothing about it. The braking, however we can answer for as being thoroughly sound, while have already indicated that steering is a mere matter finger and thumb. The suspension is in keeping with rest of the car—absolutely adequate.

While it has nothing to do with the design of the we greatly appreciated the easily fitted side curtains hood; with everything in position the Essex is every as warm and comfortable and weather-tight as the limousine ever made, and a lot less irritating than many cabriolet after its newness has worn off. Personally dislike being closed in, even for the sake of warmth dryness, but we found we could sit and drive the with all its rigging unfurled without the slightest feel of discomfort—a remark, incidentally, which we have felt inclined to make about many cars.



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8 h.p. Two-seater, £300 12h.p. Two-seater, £735 12h.p. Four-seater, £775 12 h.p. Coupé - £875

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As so many of our clients when taking delivery of their Rover cars enquire as to the possibility of a reduction in price, we beg to state that there is no possibility of an alteration in this direction as far as we can see. In order to give confidence to present-day purchasers, we make the offer that should circumstances permit of a reduction being made, all purchasers of new 12 h.p. or 8 h.p. Rover cars delivered either direct by the Company or by one of their authorised dealers between this date and June 30th next, will be refunded the difference upon application to the Company and production of the necessary proof, provided the claim is made before July 31st, 1921.

For complete specification write THE ROVER COMPANY, LIMITED, COVENTRY And at 59a NEW OXFORD STREET, LONDON, W.C.1 LORD EDWARD STREET, DUBLIN



## Just a minute, I'm using Royal Vinolia

NO time need be lost in shaving by the man eager to be off for the joys of the open road—the beauty of lake and mountain; for Royal Vinolia Shaving Stick immediately yields a profuse, creamy lather which quickly prepares the way for a speedy, comfortable, and entirely satisfactory shave. The use of Royal Vinolia Shaving Stick means a good start for the day, whether on pleasure or business bent.

## IN ALUMINIUM CASE, 1/3.

For the man who prefers a Shaving Powder, Royal Vinolia Shaving Powder will be found equally pleasant and satisfactory.

RV 45.-109

## TUNBRIDGE WELLS.

A convenient centre for the Northern Motor Owner from which to explore the Southern counties.

By FELIX RINDLE.

ever you have read The Four Men if you have not done so one Would recommend you to repair wanton a sin of omission—you remarker as wanton as was sin of omission—you Hilaire Belloc, has made great play with the age-long story of how St. Dunstan, of very pious memory, propagate nose of that high-born hot, or white Devil with a pair of redhot, or white-hot, tongs. It is to be reasons of his touched up the reasons of his own, has touched up the story, or that he has mixed the sevthem and the has mixed the state of them and shaken them, and stirred them. At any rate made the story above a little made the story above a more to another only blete it (as, according to another author, Mr. E. V. Lucas, is The second author, Mr. E. V. Lucas, one can guess at the reason. The cenes of the three acts of that Devil comedy, St. Dunstan and the Of the Comedy, St. Dunstan and Sussex, whereas the scene of the epilogue, as one may say, is Tunbridge Wells. world, as well as his wife (that very Tunbridge proper lady) knows full well, Tunbridge indeed Kent, and for that county, indeed any county except Sussex, Belloc has little or no use.

Belloc has little or no use.

Men and Sussex women, Sussex hills and Sussex ale men and Sussex women, Sussex hills and Sussex ale sussex bacon and Sussex cheese, Sussex ale sussex bacon and Sussex cheese, Sussex ale by even, Sussex bacon and Sussex cheese, Sussex bacon and sussex cheese, Sussex port—all are excellent. Nay, each of that Sussex is for Mr. Belloc Mind is so much the best that Sussex is for Mr. Belloc A. Merely the Mark Thereby the Mark And the hist county in England but also the last. And the first county in England but also the last a Kentish M. With a difference, one would have you tall is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of it all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you a Man of Rendered the humour of its all is that are you are you a Man of Rendered the humour of its all is that are you are you an have you to know—are you a son of any other English whose sons are incorrigible), county to know—are you a son of any other Engineering (except Yorkshire, whose sons are incorrigible), of saging so while at Mr. Belloc you laugh with him—so that so forthright is he in his Chaging, so whimsical, and yet so forthright is he in his obsession.

But Tunbridge Wells—hereinafter to be referred to as Wells—wells—hereinafter to be referred to as Wells—is only just in Kent, only just on the wrong of the hem of the petticoat of Sussex and the fringe of the hem of the petticoat of Sussex and the ring silken gown of Surrey; and the place itself is so



A leafy glade at Tunbridge Wells.

urbane, and is set in so fair a countryside, that either Sussex or Surrey might boast of both place and countryside did it possess them. The Wells is not in the Weald, but the countryside of the Wells is so umbrageous that a man without a map might fancy it to be of the Weald; and as one mounts the hill to Frant one sees, it one be wary, through a gap on the right-hand side of the road, a remarkably fine view of the Weald. And if the air of the Wells be not as bracing as the air of Brighton, it is not more enervating than the air of Hastings. Moreover, the Wells is a less distracting place than Brighton, and if Mount Ephraim is only a hillock, so might a Pennine Ranger regard the South Downs-Ditchling and Chanctonbury and Bignor and Littleton and the others—as green hills, not the" majestic mountains" that old Gilbert White deemed them. No blame to the Wells for not being other than it is, nor any blame, either, that it is not elsewhere -in Sussex, for instance. It is a town, but not an ungracious one. If it lacks the dignity of Bath, it is not spoiled for a bird's-eye view by gaunt factory chimneys, as Oldham is spoiled; and if it owns a mean street, it takes

good care not to flaunt so undesirable a possession. It is a town of what the house agents describe as "desirable residences," many of them "detached," perhaps still more "semi-detached," and is so inoffensive, so restful a town—so much a "garden city"—that Mr. Belloc might surely have overlooked its unfortunate geography and rounded off the play.

It was at Mayfield, that pretty Sussex village due south from the Wells, seven and a half miles distant as the wise old crow flies, that St. Dunstan, with his ever so hot tongs, pinched the Devil, his nose. And the Devil, for all the traditional climate of his kingdom, found the pain of the pinching so excruciating that he leapt at one bound from Mayfield to the Wells and there immersed his grossly insulted and grievously smarting "olfactory organ" in the spring at the foot of the Pantiles, and so "imparted to





The Toad Rock, an object familiar to visitors.

the water its chalybeate qualities." A few centuries later, in 1606, Dudley, Lord North, on a visit to the Earl of Abergavenny at Eridge Park, discovered the water, drank of it, and was cured (or deemed himself cured) of the something-or-other. Followed, in 1630, Henrietta Maria, Charles the First's queen, and after her Charles the Second himself, his queen, and the Court. A little place in those days was the Wells, so little that the majority of Charles's suite had to sleep some in tents and others in huts, as after them did more than one generation of visitors. The vogue with which those royalties endowed the place was nothing like the vogue that followed on a visit from Queen Anne. In her time, and for long years after, the town, grown and continuing to grow, drew beau and macaroni and dandy in turns, and eighteenth century and early and midnineteenth literary folk, as well as the world of fashion.

Nowadays the waters of the Wells do not count against Bath or Buxton or Harrogate waters; but now, as then, the Wells is a convenient distance from London, and the Pantiles drain quickly and take the shadows of the bordering limes, folk who have not seen the Bowder Stone in Borrow-



Summer sunshine is pleasantly tempered in the Pantiles.



An outcrop of the rock upon which Tunbridge Wells is built.

dale marvel at the Toad Rock, and trippers of the Wells happily gets only a few—gape at the Rocks.

One thing with another, then, the Londoner world well to make the Wells an objective for a run on these length will these lengthening days of February, while the owner from further afield—say, the Midlands, or the of England—might later in the year take up his que there and explore Kent, Surrey and Sussex by means series of day and half-day runs. The distance from to the Wells by the direct route—New Cross, Lewis Bromley, Farnborough, Sevenoaks, and Tonbridge roughly 36 miles; the return journey, by an alter route-Forest Row, East Grinstead, Blindley Bletchingley, Redhill, Reigate, and Sutton-World extended to a mile or two over fifty. The way for right from a fork a quarter of a mile beyond Langton three miles and for the way for three miles and for the same for the sa three miles out from the Wells, goes straight, Grand Ashurst, to East Grinstead, but the left-hand bridge, Hartfield and Forest B bridge, Hartfield, and Forest Row—is less narrow, mile or two longer, and beautifully sylvan.

## MOTORING TERMS ILLUSTRATED.

We have decided to make this endeavour to lighten the darkness of those "new" motorists who have not yet mastered the intricacies of expert automobile terminology only after a most severe mental struggl struggle. Even now we fear that the value of our effort may not be appreciated, and that our pictorial definitions may not pass into the standard works on the subject.

1,98,



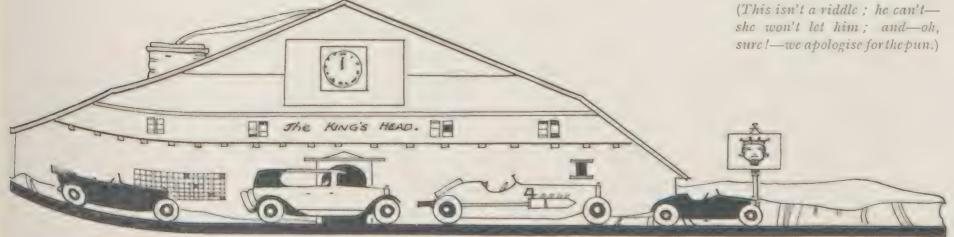
A fat spark is much to be desired. It causes rapid consumppardon, combustion-and if plenty of "juice" is available makes life quite endurable. Some give a better performance when running on the fermented juice of the grape than on petrol.



We cannot help feeling that the artist is a bit wide of the mark in the left-hand picture. With irreversible steering, road shocks caused by hitting stones, brick walls and so forth, should not reach the driver. We merely make the remark en passant, as it were.

" Fat" Spark.





Automatic lubrication.—Cars are so well trained nowadays that it is by no means unusual for them to draw up at a Mace within the meaning of the Act as soon as the statutory hour arrives. The law makes the recommendation that instance. One in the meaning of the Act as soon as the statutory nour arrives. The third in order 10 o'clock at night. One is absolved from following this recommendation if one can prove the conscientious objection of pussyfoot proclivities.

## MY LOG-BOOK.—By HERMES.

A FOOL and his car are soon married. A car and a fool are soon separated.

THE final regulations respecting the new motor regulations are delayed—but there's no delay in taking your money.

THE 25-30 h.p. R.F.C. model Crossley is evidently popular. Already the makers have received so many congratulatory letters that they have published a number in booklet form. The originals are available for inspection at Manchester.

FOR preventing water from freezing in radiators and cylinder jackets, the "All's Well" Oil Co., 16, Finsbury Circus, E.C.2, recommend their special compound. It is claimed to be free from corrosive acids and perfectly dependable.

THE A.A. have issued a booklet giving the points of the new motor taxation in the proverbial nutshell—also in unlegal language, so that he who motors can read. Any changes will be notified to members as fast as the Cooke can dish up the (printer's) "pie."

TO commemorate its twenty-fifth anniversary, the Autocar has issued an interesting booklet. Its one defect is that it makes one feel aged—so great is the contrast between "Then and Now." If only to gain an idea of motoring development this little brochure is worth perusal.

THE well-known Smith specialities are on view at the Scottish Motor Show at Glasgow, which closes on the 5th inst. These accessories, wholly of the latest types, include speedometers, carburetters, starting and lighting systems, and a host of other acceptable Great Portland Street motoring adjuncts.

Licence holders conforming to the Minister of Transport's requirements are supplied by Messrs. Lamplugh, Tyseley, Birmingham, in addition to the list of firms I gave in our last issue. For cars and motor cycle patterns the prices are: brass, 5s.; nickel, 5s. 6d. Holders for commercial vehicles cost 4s. 6d. each.

BENZOLE has proved a useful alternative fuel, and I am glad to hear that it is to be available more freely than before. Nearly the whole of the benzole producers in this country, combined under the title of the National Benzole Co., have set up large fuel-producing installations. The benzole is of high quality, and the price is reduced by 3d. per gallon.

SHELL motor spirit, so admirably distributed throughout the British Isles, is now handled by a firm known as Shell-Mex, Ltd., a combination of the two great concerns whose names are incorporated in the foregoing title. As before, the popular fuels, Shell and Mex, will be retailed, as well as the Snowflake, Bear Creek, and Empire lamp oils, and other well-known productions.

Some excellent times were achieved at the recent Italian flying kilometre contest, when nine different makers of cars, mostly amateur-driven, competed. A twelve-cylinder Packard averaged the distance at the rate of 96.8 m.p.h., second place being taken by a 4½ litre Fiat at 86.4 m.p.h. A 20-30 h.p. Fiat had over 70 m.p.h. to its credit, and a small Bugatti put up the commendable speed of 63.5 m.p.h.

R INGS for "Her" are dealt with attractively in the brochure to which Messrs. Allen and Simmons, of Reading, append their name. The heroine in the case is not, however, the "dear distracting female" most of us are ruled by, but that equally caress-demanding personality, the car. There's a lot more in piston-ring design than most people think, as you'll find out if you study this informative work.

THE war has left its impress on individuals as well as nations, and I found myself in last month's notes misquoting a single letter—I can't blame the printers, poor chaps! this time. By force of habit I wrote "A.S.C." for A.E.C., when referring to the Goodyear giant pneumatic tests on a Daimler char-à-bancs and an A.E.C. lorry, the last-mentioned initials standing for the Associated Equipment Co., who are responsible for so many high quality commercial motor vehicles.

THE licence card is to be carried on the vehicle's "next". We weren't aware that motorists possessed such an

OU need not waste a twopenny stamp nowadays if you to join the A.A. Any of the Association's patrols will you.

IT'S not the pound per H.P. we mind so much—it's restricted is small decimal as the whole. No wonder Euclid turned grave!

THE virtues of aluminium pistons are usually acknowledges. G. N. Higgs, 31, Vauxhall Bridge Road, S.W., tell you a lot about them.

A MOTORIST who was compelled to travel a distance of in 20 minutes on a deflated tyre reports that he was agreed surprised to find the cover, an 880 by 120 Goodyear, had escal damage in spite of this drastic treatment.

ARIOUS excellent types of bodywork by the Regent Capparticular merit being a 7-seated Minerva landaulet and a 5-touring car. Elegance, comfort and style have been capstudied in both.

VERY interesting experiments in regard to dazzling hear have been, and are being, carried out by the R.A.C. on which special stress is laid comprise: the lamp's effective the effective illumination on the road, and the actual dazzle on a person meeting a car's brilliant rays.

WE have received a couple of well got up booklets from Rover Co., of Coventry, one dealing with the 12 h.p. cylinder water-cooled chassis, the other describing the twin cylinder cylinder water-cooled chassis, the other describing the twin air-cooled horizontally-opposed model. Both brochures are printed, informative and particularly well illustrated.

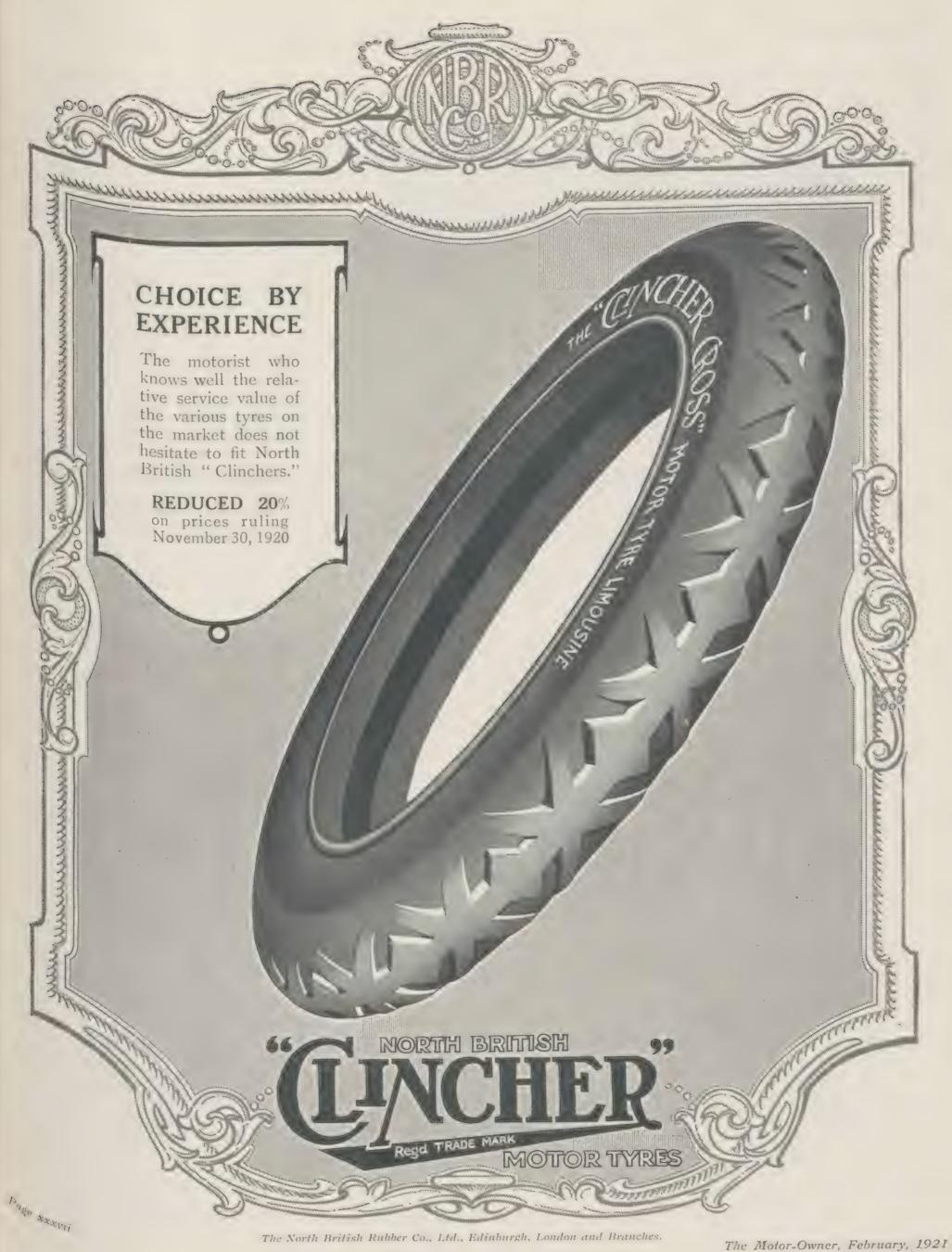
HOW to get business is very welcome information. The that psychology plays in this desirable act is admirable forth in Selling, issued monthly by the St. James's Advertage Co., of Aldwych, W.C.2. If you want to know how to sell a and other things—read it. If you want to know what makes buy a car—and other things—read it.

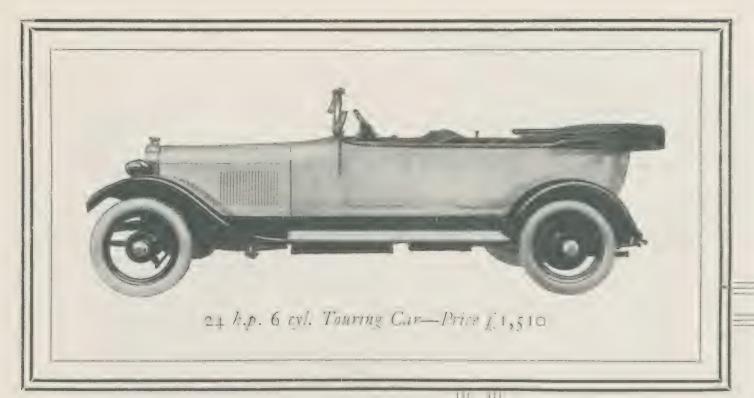
PEOPLE who have cars to sell, or who wish to purchase a set hand model, should make a note that auction sales of used care held every Tuesday, at 2.15 p.m., at 193, Tottenham Road, W.I. The premises, specially built for the purpose, spacious, and Messrs. Smallman Bros. appear to be very up-to-day cars, commercial vehicles, and motor cycles are dealt with, trial runs are given.

Readers who are fastidious respecting their lamps show send for the booklet issued by the F.R.S. Lamps Co., at Street, Birmingham. The various styles of headlights, etc., clearly illustrated and of good design, and include the usual electronserts, as well as lamps utilising acetylene and oil. Very interest also are the sets that employ waste current from the magneto road illumination purposes.

THE result of the R.A.C. test of the Overland is now wall public. Comprising an investigation of fuel, oil and dail consumption, it was also a reliability trial. For seven hours for six days, the car was driven on the Brooklands track at 30 m.p. covering a distance of 1,262 miles. Fuel consumption worked to 33'47 m.p.g., oil to 1,454.4 m.p.g., and the water loss to 4 pint 6½ oz. There were no involuntary stops.

MESSRS. BROWN BROS., whose ingenuity has proving a cheerful little house organ termed The Accessory. It includes of course—but cleverly suppressed—information respecting firm's specialities. Also between the covers you find very readable articles on topical subjects, as well as things you don't know ought to—and that touch of lightness that makes the reader down the booklet with a smile. It's more than worth the price which is nothing.





## "Absolutely ——satisfied"

The following letter from a Sunbeam owner typifies the universal opinion of the 24 h.p. 6 cylinder touring model.

" Dear Sirs,

Nov. 23rd, 1920

I feel that I must write and tell you how absolutely satisfied I am with my 24 h.p. 6 cyl. Sunbeam touring car that I bought from you through Messrs. J. B. Jones, of Carmarthen.

I have owned since 1912 other cars (both 6 and 4 cylinder) of leading British, French, Italian and American manufacture, but never have I come across a car to compare with this 6 cylinder 1920 Sunbeam.

She is, as you aptly describe her, "Supreme." I have never owned or been in a car that I have liked better. She is marvellous.

Wishing you every success.

Yours faithfully, (signed) R.B.E.''

## THE SUPREME

## SUNBEAM

Sunbeam owners, present and potential, are invited to our new Showrooms, shortly to be opened at 12 Princes St., Hanover Square.

SUNBEAM— COATALEN AIRCRAFT ENGINES

## THE SUNBEAM MOTOR CAR Co., Ltd., WOLVERHAMPTON

Manchester Showrooms-106 DEANSGATE

Southern Service & Repair Depot: Edgware Rd., Cricklewood, N.W.2

Phone: Willesden 3070. Telegrams: "Sunoserv, Crickle, London
London & District Agents for Cars: J. Keele Ltd., 72 New Bond St., W.

# THE "MOST BEAUTIFUL" PAIGE. A car which commended the comment of t

HEN people speak of the Paige as "the most beautiful car in America," they are apt to forget that there are two models—one, the represent the Paige, and a smaller car of 25 h.p. The latter, as the naturally not as much reserve power while naturally not possessing quite as much reserve power as the 35 h p. in the possessing quite as much reserve power pow as the 35 h.p., is, nevertheless, not noticeably slower or less

Comfortable, and is as pleasurable to drive.
Thirty-fire 1 Thirty-five horse power, especially in these days of heavy taxation and general cost of living, is a little on the high side, and it is quite conceivable that the smaller model may appear to present superior attractions on account of its lower price and smaller cost of maintenance. Probably there is very little in it, although we have not tested the house petrol constraints at the two cars; we can say, relative petrol consumption of the two cars; we can say, however, for the benefit of those whose leaning is towards the smaller can the benefit of those whose leaning is towards that its the smaller car, that it is capable of a speed of which one can him advantage and it is capable on British roads; that its take advantage only infrequently on British roads; that its hill-climbing powers on top speed are exceptional—a point struck us also in top speed are exceptional—and that Which struck us also in regard to the 35 h.p. car—and that en:

(b) far as its lines in regard to the 35 h.p. car—and that en:

(c) far as its lines in regard to the 35 h.p. car—and that en: so far as its lines and general finish are concerned it is as land entitled and general finish are concerned its as its eminently entitled to the adjective "beautiful" as its better sister. As the two larger sister. As a matter of fact, the main difference being the two between the two cars is in the engine, the bigger of the two is of Paige paige and design, while the "25" being of Paige manufacture and design, while the "25" is a Continental motor.

To those who have experienced the delightfully smooth Vet lively running of Paige cars, little need be said; but and essentially a third Paige cars, little need be understood, and we do not rounding to be experienced to be understood, and we do not remember riding in, or driving, a car which

Leicester Square, but at Penshurst, not W.C.2.

combined such instant responsiveness and the impression of an ample reserve of power with "silkiness" of running

in greater degree.

The fact that this car is of American manufacture is not evident in either performance or appearance, although its exceptional capabilities are doubtless due to the high ratio of power to weight—which is, of course, a typically American characteristic. Nowadays we consider the point a good one on this side also; there is no argument as to its advantage—the only difficulty is that an extreme lightness of chassis calls for considerable skill on the part of the designer to ensure that the car shall hold the road well in spite of it.

In this respect, at any rate, the designer of the Paige has been successful, and either model is as safe and easy to



A Paige car in touring trim.

hold to its course at any speed of which the engine and the driver's nerves are capable as it is at a pottering twenty. That was another Paige feature with which we were immediately impressed with both models—the feeling of essential safety which one instantly experiences on taking over the wheel. With a strange car there is often a necessity to concentrate all one's attention upon it at speed until one gets used to its "feel," but with neither Paige is there any inclination to "get down to it" and crouch over the wheel as the indicator needle creeps past the fifty mark.

After a long course of piloting war-worn Sunbeams and a succession of more or less decrepit "Florries" over atrocious Balkan roads, the present writer's first experience for a considerable time of a decent car was on a Paige. He was more than delighted with it, but inclined to distrust his impressions, thinking that the comparison between this new car and the conditions of his previous year or so's "motoring" might unconsciously affect those impressions. Now, after almost continuous testing and sampling of modern cars of repute for nearly another two years, he is able to look back upon that first experience and realise that the original impressions were not so far wrong after all. The Paige is undoubtedly one of the few "best" American cars we have on this side, and it bears very favourable comparison with the best that we ourselves are able to produce.

That either model is capable of a speed well in excess of the limit almost goes without saying; there is the same effortless progression with both of them, however, that is not so common an attribute of modern cars as is the ability to put up a road speed in the neighbourhood This is, indeed, a distinctly individual of a mile a minute. Paige characteristic; a characteristic so noticeable, moreover, that it does not require an expert to discover it.

## THE RUGBY UNION GAME.

Some Comments on Notable Players in the National XV's.—By E. H. D. SEWELL.

(Exclusive Photos. by "The Motor-Owner.")

ITH the wind howling and the drizzle drizzling and your temperature dodging about between 100 and 102 deg, it is not facile to write cheerfully on any subject, but time, tide and one's editor wait for nobody, and that's all there is to the problem at present confronting me. I suppose I am "enjoying" the results of a 16 hours jaunt to see the Welsh Union's Trial at Cardiff, a game which was very interesting to watch, though it was played in four to six

inches deep, sheer, holding mud for the most part of the field. Folk who only see their "big" footer at Twickenham or Richmond or Blackheath or Inverleith can have simply no conception of what the Cardiff Arms Park pitch can be like. I have seen it often, but never so stodgy and holding as on January 5th. In the circumstances it was not an easy matter to weigh up respective form as between England and Wales, but I saw nothing to make me swerve from my belief that Wales will win on January 15th. (This is written on January 9th.) There is no use going over old ground again. In last month's issue of The Motor-OWNER I gave my reasons, written in November, that if Pillman did not play for England and Reeves and Wetter were the Welsh halves, Wales would win; and to that I adhere, though in doing so I make no allowance for the "run of the luck," the "bounce of the ball," and so forth, which may "give" the match to one side or the other. In the Welsh Trial I saw a very promising wing three-quarter in J. Ring, of Aberine article I make no doubt. If

Trials are the Table this result will be a superior to the state of the trials are the state of the st at Twickenham on the 15th this young man may startle those who haven't seen him. Of those who write Rugger and whose lines are cast east the Severn, I believe that only D. R. Gent and the writer have seen Ring play, and fortunately for me my views coincide with the little man's.



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Everything depends on the English half-backs Kershaw and W. J. A. Davies. People who are accus to see Davies doing almost as he likes in the Rugby like Trial matches may make Trial matches may receive a shock, for it is abso certain the Welsh method will not provide him will half the rope he had a snock, for it is a will half the rope he had a snock, for it is a will half the rope he had a snock, for it is a will be some he had a snock, for it is a will be some he had a snock, for it is a will be some he had a snock, for it is a will be some he had a snock, for it is a will be some he had a snock, for it is a will be some he had a snock, for it is a will be some he had a snock as a snock, for it is a will be some he had a snock as a snock, for it is a will be some he had a snock as a sn half the rope he has had in these rather scrambling deceptive affairs. Kershaw is not properly recovered the ankle dislocation he sustained on November against Oxford University, and a risk is taken in pa him. That he is the best scrum half playing I had doubt. It is not in England's favour that both Davies have played only once each against Wales, W club matches have a very slender acquaintance with Rugby. But both are the genuine stuff right through will never let the side down.

I was hoping the Scottish Union would have had cards on the table before it befell that I should will article. They held their Trial yesterday and reliable information to the effect that in that Trial Gracie of the Harlequins, A. E. Thomson, R.N., Services, C. J. G. Mackenzie, R.N., of the Services Browning, of Glasgow High School F.P., R. L. Glasgow High School E. Campbell Oxford University Glasgow High School, E. Campbell, Oxford United J. H. Carmichael Western J. H. Carmichael, Watsonians, were the best of the and R. A. Gallie Glassonians and R. A. Gallie, Glasgow Academicals, an old cap came into the match at the eleventh hour, of the form



Lieut.-Commander W. J. A. Davies, R.N., the English captain, taking a penalty punt.

February, 1921

The dealing players. The looks de against the Frenchmen looks like panning out at: Forsayth back: Browning, Mackenzie, Gracie of Thomson, Mackenzie, Gracie of Thomson Mackenzie, Gracie Gracie Gracie Carmichael, three-Illianton; and Carmichaer, the bell halis. A. T. Sloan and E. Camp-Melling A. T. Sloan and E. Camp Mellings, Usher, Maxwell, Gallie, the nucleus formard It is not urprising the forward. It is not the Onins, urprising that Gracie, of the Quins, The not cetting into a Rugby Union the control to be a Ind, though finally asked to be a reserve for England for the Welsh match should be Scotland, match, should do well in Scotland, of Scot-The saclass above any of Scotcentres of last season, and the Chil, centres of last season, and the childs of the Scotland and earlier Linion had lailed to the Scotland and earned lailed to the Scottish Union had lailed of the Scottish Union new therit to reveal any newcomers of

A SPOILING TACKLE. The attempt to prevent C. A. Kershaw from passing to his partner, W. J. A. Davies, by means of a spoiling tackle has failed.

It may be interesting if at this juncture I give the names the respective Salas if at this juncture I give the names. England C Robinson Ligland. J. Baxter, G. C. Robinson, J. Daniel, Major Light Com. E. W. Roberts,

· Stanley Stanley and Eng. Lieut. Com. E. W. Roberts,

Scotland. J. E. Crabbie, J. M. Dykes, T. Scott, J. M. Tennent.

M. Tennent.

Dr. S. D. D. Compbell F. S. Strain, B. Doran, Iroland J. M. Tennent.
Dr. S. B. B. Campbell, F. S. Strain, B. Doran,

A. Daish and J. MacAulay. Wales. The W.R.U. Committee.

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deal ioin. All the above are former Internationals except Stanley

Stanley, Macgill, Strain and Daish. With the Irish match bringing another big motor crowd to Twith the Irish match bringing another big motor crown the Irish match bringing another big motor crown the Irish team on February 12th one should be forecasting to describe the Irish team but the Iri the Irish team, on February 12th one should be forecasting to do with war the news from Ireland these days has more who with war the news from Ireland these days has more up to the land the second it is just a pure toss up to do with war than Rugger, and it is just a pure toss up Meh will be in the town. Obviously Crawford (full back), Who with war than Rugger, and it is just a pure toss a lief will be in the team. Obviously Crawford (full back), half arland, Cullen Dialem Wallace, threequarters; Horan, and Court-Mekarland, Cullen, Dickson, Wallace, threequarters; Horan, Doherty Dickson, Wallace, threequarters and Courthalf Doherty, Price, Collopy, Crichton, Stokes and Court-

that Doherty and Horan are of the othere and in form, but, of the others, who can tell? McFar-Land, who is really a full-back, ind who is really a full-back was played as a wing last when hoved in the did best when Wales has the centre against in the Wales, has been tried in the North of Irokana Season in the North of Ireland, not with startling incland, not with starting side of Bondy on this since harbour Lacks anything about Indication That was a in mind condition before The War. The This is an Verknowthem. Wes until the buttell is over ad then they are 1. Camp. W. Oxford 1 to the demonstration of the Ling the back at the

and in January.

not quite sure! We may depend on the Whirroo and Bejabers contingent to turn up at Twickenham and dash about the field in their usual inconsequent way, and if they should spring a surprise I for one would not be so very surprised. For would that not be in keeping with their characteristics?

#### DAIMLER PRICE REDUCTIONS.

Very substantial reductions in the price of Daimler chassis are announced, the figure for the "Light Thirty" being down by £225 and that of the "Standard Thirty" by £150. We feel that these reductions will be viewed with gratification as indicating that the motor-car industry is reaching a condition of greater stability than it has known since the Armistice.

#### MR. STRAKER ON FUEL ECONOMY.

In my opinion the campaign which the R.A.C. are pursuing, and which you are giving publicity to, should be concentrated on investigating and making good: Leaky float valves;

results.

All reputable manufacturers supply their cars to the public with the setting which best effects good economy and efficiency, and whereas no doubt when cars get into the hands of a number of users the wrong jets may be in them and a revision is desirable, on the other hand to advise the public to replace the present jets by undersized ones, in my opinion, is undesirable and likely to lead to a good deal of discontent and unsatisfactory

leaky taps; flooding and some small adjustments.

I would suggest that a list is published classifying the different makes of cars and setting out respectively the manufacturer's direction as to what the consumption should be of these cars. The public would then be advised and adjustments effected accordingly.

SIDNEY STRAKER.

Lieut. C. A Kershaw, R.N., who dislocated his ankle in November while playing against Oxford University.

# MODERATE POWER AND HIGH ACHIEVEMENT. A Criticism of the 17.5 h.p. Hupmobile on the

HE "Hup," as it is familiarly called, is probably one of the best known and longest established cars of American manufacture in this country—a fact which, in itself, is sound evidence of outstanding merit. It is a remarkable car in many ways, and differs from the majority of the vehicles of its nationality in possessing an engine of comparatively small dimensions—the R.A.C. rating is 17.5 h.p.—and high efficiency.

the R.A.C. rating is 17.5 h.p.—and high efficiency.

So far as maximum speed is concerned, the Hupmobile is good for between 50 and 60 miles an hour, while she is an altogether remarkable top-speed hill climber for her power. One must admit that the car gives the impression of possessing a somewhat low top-gear ratio, which would account for its hill-climbing capabilities; but on the other hand it is amply fast on the level and its fuel consumption is

eminently reasonable.

The price of the car—£750—is not low, but the Hup is complete in the fullest sense of the word. One expects adequate protection in the shape of an easily-erected hood and a full set of well-lighted side curtains with any car, and especially with an American vehicle nowadays, but the Hup is unusually well equipped, the curtain sections by the four doors being arranged to open with the doors. Normally one hesitates to fit up all the side curtains of a car, unless the weather is extraordinarily cold and a long journey with few stops is to be undertaken, on account of the difficulty of climbing in and out of the car. With the Hupmobile, however, there is no such difficulty.

In regard to the driving and general maintenance of the car, we have only one fault to find, and that is a fault which became noticeably less apparent in the course of the several hundred miles which we drove the Hup. We refer to a certain stiffness in the steering; but, as the car had travelled a total distance of 39 miles only since leaving its crate when we took it over, and as American methods of testing and running-in are notably different from ours, there is really no ground for complaint.

Apart from this initial stiffness, which, as we have said, quickly wears off, we found the steering satisfactory. The gear change—centrally situated with the "side" brake lever—is simple and fool-proof, a good point that is liable



A 17.5 h.p. Hupmobile ready for the road . . .

have already mentioned the car's top-speed hill-topowers, but its ability to tick along in traffic and up and get away immediately without use of clusters, and with no manipulation other than that accelerator pedal, is even more remarkable—which us that that same accelerator pedal is one of the have encountered on cars of any price, make or matter how long the run.

The springing of the car, empty but for the drive found not at all bad; but with a full load of five people as nearly perfect as one could wish. The large road doubtless "dither" on the pot-holes of our modern but scarcely a shock is transmitted to the passengers.

A point which we, and probably most other me also, appreciate is the provision of a small reserve



. . . ready to thrust its modern nose to the very gates

petrol tank, which can only be used by deliberately the necessary tap. It is a small matter, but that tap advantageously be situated within reach of the instead of immediately above the tank at the rear of the its satisfactory, however, to have the reserve at all its provision is indicative of the careful thought which been expended throughout the car to provide the comfort and to minimise the trouble attached to the and maintenance of a car.

We must say one final word in regard to the electrical equipment. The starter we found amply per to turn the engine over quickly from the cold the which is not as usual as it ought to be—and fact, behaved themselves excellently, despite the considerably more than half our running was done dark. The headlights give a thoroughly driving illumination, and as the switch, with contained and tail; side, tail and headlamps' dim on," is within easy reach, there is little excuse for incoming other road-users.

We can honestly express our complete satisfacti and appreciation of the Hupmobile.

Page xxxis



# The Car that is just a little Better

THE Overland is a good car. It is a car that is just a little more economical in its fuel requirements—just a little lighter in its tyre bills—just a little more complete in its equipment—just a little better in its upholstery—just a little better in its upholstery—just a little better in the things that make for service and economy—and a whole lot better in comfort, for

the New Triplex Spring suspension makes this light weight car a genuine luxury to ride in.

Prices, including complete equipment: Touring, £495; Roadster, £495; Sedan, £800; Coupe, £750; Three-quarter Landaulette, £750. An interesting catalogue will be mailed on request.

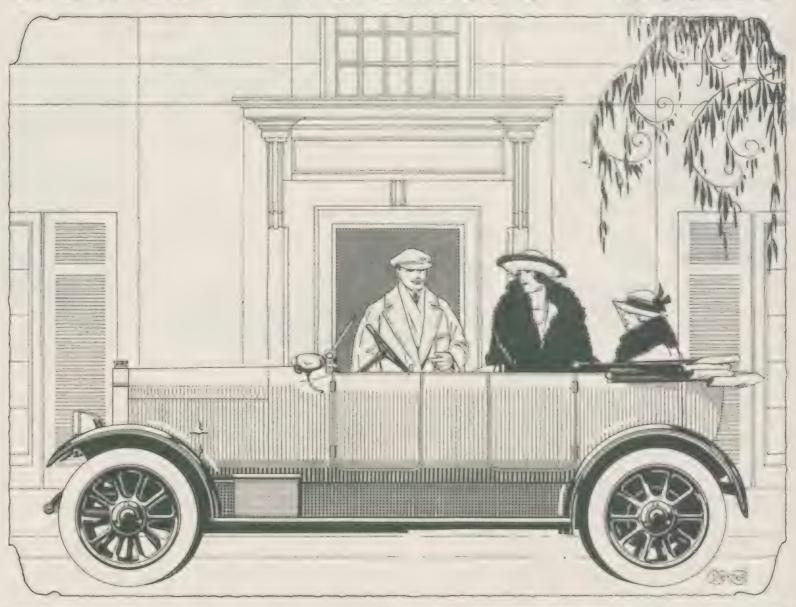
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Although light in weight, the car holds to the road under all conditions. Its engine—the famous Coventry Simplex—possesses remarkable flexibility and develops extraordinary power. Easily does over 45 miles an hour and climbs any hill with a full load.

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WILL DO AN AVERAGE OF 35 MILES PER GALLON. Our catalogue illustrates and describes the various mechanical features of the car which distinguish it from all others. Send for it.

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Page xli

Gerrard (4 lines)







#### Sankey Wheels cannot give way

EVERY mile that your car travels is crowded with stern adventure for the wheels. Not only should they be so strong that the possibility of collapse is ruled out, but that constant hammering cannot affect their "truth" appreciably. This is as essential to pleasant riding and tyre economy as to complete safety.

Further, your wheels should be proof against rain, rust and rot, really easy to clean thoroughly, and of shapely appearance. Each and all of these major considerations are developed furthest in Sankey Wheels. They are all steel—stamped out bodily in two complete sections, welded unbreakably in one hollow, light but immensely strong unit—capable of out-lasting the car.

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# SANKEY & SONS, LIMITED, HADLEY CASTLE WORKS, WELLINGTON, SALOP

## MOTOR POWER ON THE ESTATE.



Progressive Methods on a large Lincolnshire Farm.—By H. Scott Hall.

HE bald statement that a farm of between 8,000 and 9,000 acres, of which nearly 3,000 is under cultivation, is to be worked entirely without the blood of without horses is not likely to stir the blood entered his stable. In the majority of cases he and if he had no experience ared his stables out ages ago, and, if he had no experience larming, would be inclined to regard the above statement being closely linked with the rumour concerning the Anne On the other hand, Motorist who is a first with the rumour concerning the motorist who is a first with the rumour concerning the motorist who is a first with the rumour concerning the motorist who is a first with the rumour concerning the motorist with the rumour concerning the rumour motorist who is also a farmer will probably scoff at it, inotorist who is also a farmer will probably scon at the control of the control o The its real significance.

The horse as a means of road transport is rapidly the most stubborn of horse as a means of road transport is rapidly obsolete, and none but the most stubborn of our deticharies are unable to envisage a time when that him will be about the streets of our minimal will be absent entirely from the streets of our however, who can see the ly will be absent entirely from the streets of the coming will be equally as scarce about Those of us, however, who can see the coming when horses will be equally as scarce about and cultiand cultivated areas are still regarded as more than a little

Consemad. quently, when we find a real practical 6 Xample of a horseless farm we are more than a little

inclined to wave our arms and say, "We told you so."

It is not as though the case I have in mind were an unusual one. It is not as though it were merely an experiment, or a Government-controlled concern in which expense of operation was quite a secondary affair. The farm of which I write belongs to one of the most successful farmers in the British Islands, if not in the world. It is a part of the largest commercially farmed estate in this country. I am referring to that of Messrs. W. Dennis and Sons, of Lincoln and elsewhere, but chiefly of Lincolnshire, and, in particular, I am concerned with the Nocton Hall estate, which covers between 8,000 and 9,000 acres, of which very nearly 3,000 are actually cultivated. Here, again, mere figures of acreage convey but little to the non-agricultural reader, and I had perhaps better point out that the majority of farms in the British Islands are from 300 to 500 acres in extent, while many are less than the area indicated by the smaller of these two figures. necessity for laying stress upon the importance of this undertaking, and also of pointing out its financial success, will be apparent to all. Methods which promote success on a large farm may generally be copied on much smaller ones, particularly when, as is the case here, it is clear that the extensive area is cultivated by increasing the number of unit equipments in proportion to the acreage tilled.

The Nocton Hall estate is managed by Major L. M. Webber, a man whose ideas are commensurate with

the undertaking which is in his charge. His ideas are nevertheless strictly limited by the necessity for the provision of an annual dividend. He came into this estate, I understand, about the time when a good many of us began seriously to turn our thoughts to commercial pursuits, after a temporary lapse into more strenuous living. He quickly realised that the success of modern farming was largely dependent upon the extent to which machinery was employed,

All the wagons are fitted with special tow-hooks: the tractor will leave the two wagons seen in the picture and will return to the field for two empty ones.

and, above all, he foresaw the necessity for making adequate use of tractors. At that date a few of these machines were employed about the estate-mostly of the lighter type, and, largely on that account, not entirely to his liking.



February, 1921

He realised that, for economical working, a machine with a minimum capacity of three furrows at a time was almost essential, and he set about discovering something which would meet his requirements in that regard.

Fortunately, the Society of Motor Manufacturers and Traders' 1919 tractor trials were then being widely advertised, and he decided to await their advent before coming to a decision on this important point. As the result, largely of his own observations of those trials, he selected a Fiat tractor, delivery of the first machine being made in December of that year. At the time of my visit to the farm in October last the nineteenth Fiat was then arriving, a circumstance which rather seems to indicate that the major was satisfied with his choice.

Space forbids my entering into any wealth of detail in describing the work which is carried on by these tractors. Most readers, however, will surely be interested in the method of digging potatoes by tractors, since this, above all others, would seem to be a particularly difficult feat. Also, fortunately perhaps, this happens to be the principal





The Fiat Tractor at work on the farm.

Above: A rear view of the Hoover lifter, showing the clean separation of the potatoes from the tops.

Centre: Ready for harvesting, with an eight-foot binder.

Below: A small car has many uses on a large estate.

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operation which was going torward at the time of my visit, and one which I had, therefore, the maximum opportunity of observing. For this work what is known as a Hoover potato-lifter is used. The machine itself is American, and was designed originally for use behind horses. The number of horses required, however, and the consequent expense of its operation, have prevented its extensive use, at least in this country, in that manner. Indeed, many users have

found that light tractors even are incapable of satisfaction operating in conjunction with this machine.

On the Nocton Hall estate these Hoover lifter overhauled upon arrival, and their construction is held in order to make them more convenient for use tractor.

The lifter itself consists of a broad shovel at the principle ich is lifted or lowered at the principle. which is lifted or lowered, according to requirement

CATTLE-HERDING UP-TO-DATE.



February, 1921

Above (left): Cutting three furrows, 10 in. wide by 9 in. deep, for potatoes. (Right): The tractor's standard towing capacity.

Centre: Potato "lifting," showing the convenient position of the operator of the lifter.

Below: A Fiat tractor, used for stationary work, driving a hay baler.

This of the potato plants one after This shovel lifts the potato plants one after the are immediately top rear This shovel lifts the potato plants one and they are encountered. They are immediately a small of a countered. they are encountered. They are immediately the by a small elevator, which lifts them to the top rear machine and the upper of a couple of the machine and drops them upon the upper of a couple thrown Vibrating and drops them upon the upper of a coup-larating forks. The vibration has the effect of Thrating forks. The vibration has the enece the by the upper form the tops, the latter being thrown the upper form the tops, the machine. The the upper fork to the side of the machine. The through the prongs the latter being through the upper fork to the side of the machine. the upper fork to the side of the machine.

In closer than the lower fork, of which the prongs this fork cleans the Proper fork to the side of the process of the proce Intators and deposits them to the rear of the machine, Melans and deposits them to the rear of the machine, readily visible and easily accessible to the

in order to ensure that the whole of the crop is gathered. These operations are similarly necessary in all other methods of potato picking. For both of them the Fiat

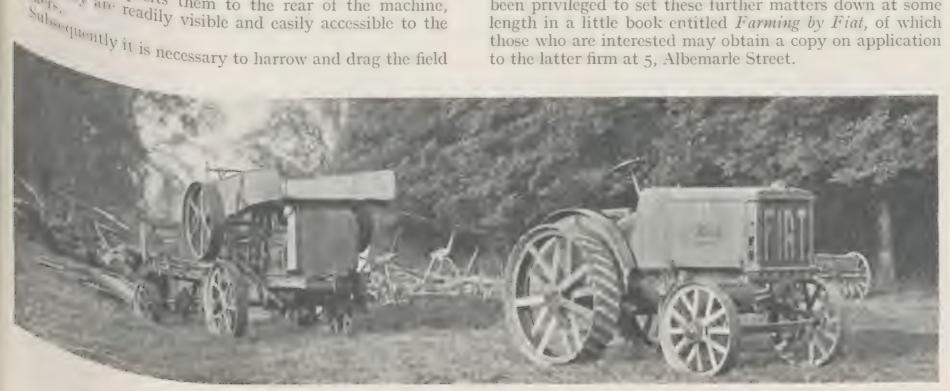


tractor is used, and the ultimate economy effected by using tractors instead of horses is definitely shown to be £5 per acre. As the average yield of potatoes in these fields is ten tons per acre, the saving is seen to be no less than 10s. a ton. Considered from another aspect, the



economy effected in potato picking alone is sufficient to save the whole cost of a Fiat tractor if 120 acres of potatoes are grown in a year.

A saving equally important and quite as tangible is effected in other farming operations, and, still more vital in a country where the weather conditions are so unstable as in this of ours, the economy of time is even more notable. I dare not, however, further trespass upon the pages of The Motor-Owner. I have, however, by courtesy of both W. Dennis and Sons and Fiat Motors, been privileged to set these further matters down at some length in a little book entitled Farming by Fiat, of which those who are interested may obtain a copy on application to the latter firm at 5, Albemarle Street.



#### THIS MONTH'S CARTOON.

#### Mr. Louis Hervé Coatalen, the Sunbeam's Chief Engineer

THE subject of this month's Motor-OWNER cartoon, Mr. Louis Coatalen, is a happy combination of modesty and engineering ability. To him the motor industry owes more than is generally acknowledged, and his persistent, patient plodding in wresting secrets from Nature's strong-

room deserves full recognition.

Gifted with the intuition possessed by so many of the Latin peoples, Mr. Coatalen reveals veritable flashes of genius. More years ago than the writer cares to enumerate he made his first acquaintance with this great designer. At that date Mr. Coatalen had called into being the Hillman-Coatalen car, a chassis deserving of greater success than that which it achieved.

But it was during his connection with the Humber Co., immediately prior to this association, that Louis first came into prominence. Who does not recollect the famous 10-12 Coventry model of this illustrious make?—a car at a remarkably low price and thoroughly dependable.

Within the last decade Mr. Coatalen has achieved additional honours. Migrating to Wolverhampton he took over, in 1909, the fashioning of the Sunbeam, aptly termed "victor" as its lengthy list of achievements proves.

dary, 19

So speedy did these cars, under his man direction, prove that the highway 110 afforded them free scope, and it was sequently at the track at Weybridge Coatalen's "eggs" were hatched, and piled upon record.

Born at Concarneau, Finistère, in Mr. Louis Coatalen was trained as an entire the "Coatalen was trained as an entire trained as an entir at the "Gadzarts," the Ecole des Métiers, after which he joined the Parithe Clément the Clément, and the De Dion-Bouton

To his genius was due the 16-20 h.p. cylinder Sunbeam of 1909, the success of led to the 12-16 model of the same make also to the famous team of three that full third, fourth and fifth in the combined Prix and Coupe de l'Auto 940-miles 1912, in France.

In the "T.T." race of 1914 in the Isle of a Sunbeam carried off that much-co trophy, while Coatalen's genius introduct 1913, the record-achieving 225 h.p. 1951 cylinder Sunbeam, followed by aero engines eighteen cylinders developing 475 h.p.

#### THE FRENCH GRAND PRIX.

BRITISH cars will be well represented at the great French road race which this year is being revived for the first time since 1914, and is to be run in July next over

At the time of going to press England had entered seven cars, viz.: two Sunbeams, a couple of Talbots, and three Talbot-Darracqs, the last-mentioned having engines

designed by Mr. L. Coatalen.

The course, which is known as the Circuit of the Sarthe, is to be covered thirty times, making a total of rather more than three hundred miles. Preparations are now in hand to remove certain danger points and otherwise to make the route safer for the high speeds that are anticipated.

Curiously enough, it was on this very course that the first motoring Grand Prix race took place—in 1896. two subsequent races, held eleven and twelve years later respectively, were, like the first, won by a foreigner, a contingency that so disgusted the French that it was not until 1912 that they again entered. And on this occasion with success, for Georges Boillot, on a Peugeot, secured victory on the Dieppe course for his country.

It is not likely that speeds can rule at more than an average of a hundred miles per hour, since engine dimensions will be appreciably smaller than eight or ten years ago. Even so, speeds of this sort are far in advance of early great road races, once thought remarkable. In 1900, for example, the Paris-Lyons race was won at 381 m.p.h.

#### LONDON—EXETER.

F one can judge by the London to Exeter I sixth of the sort organised by the Motor Cycling which took place on Boxing Day, the sporting motoring is still very pronounced. The contest was ardness the contest with the contest was ardness the contest with the contest was a still very pronounced. arduous than at first sight appeared, since it travelling through the whole of the night. Add the fact that the weather the fact that the weather the sight appeared in the sight. the fact that the weather was unkind—markedly that no adjustments were permitted in the controls that the drivers had to avoid the controls the controls that the drivers had to avoid the controls the controls that the drivers had to avoid the controls that the drivers had the controls that the drivers had the control that the drivers had the drivers that the drivers had to exercise careful speed-judginations three-hundred at once this three-hundred-mile or so trip becomes different from one's ordinary journeys.

Certain steep ascents, such as Chard Hill, Peak ow Hill, were included to Trow Hill, were included; but to little purpose, happened, save as affording variety, since these grade were well within the scans of were well within the scope of practically the whole competitors. Where the life is a state of the whole competitors. competitors. Where the hills did give rise to inconvent however, was in the clouds of smoke that trailed many of the cars before the many of the cars, baffling their immediate followers great an extent as to compel them literally to grope

In view of the conditions the results are admit od. In the car clear the good. In the car class there were 54 competitors, of the got through. Three wheeled 46 got through. Three-wheeled vehicles lost one of the motor-bicycles, 49 out of 69 completed side. The greatest mortality occurred amongst the for of the 70 which faced the starter, 23 dropped out.



"Sunbeams"

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#### The more you motor the better it pays you

It is impossible to foresay exactly by how much the "Stitch-in-Time" Motor Service will more than pay you for its cost, or to state finally the number of ways in which it will save your time and your trouble. You can judge better by the experience of others—

In the following instance you have the experience of an owner-driver who had heard of the "Stitch-in-Time" Motor Service, but considered it a luxury.

For a short time he remained unenlightened, until one day when he called at a "Stitch-in-Time" Motor Service Depot and ordered a new pair of tyres.

He ordered a larger and more expensive pair than those fitted by the makers of the car.

The 'old' pair had the miserable total of 500 miles to their credit. They were tyres of a very reputable make—so reputable, in fact, and so astonished at them were we, that a "Stitch-in-Time" Motor Service inspector was sent along to examine them.

He was met with an account of every kind of tyre trouble that could possibly happen to tyres. Among them the most expensive and dangerous being frequent burstings and skiddings, and a continual, sickening rolling of the car.

The examination and diagnosis of the whole trouble took no longer than time enough to glanceat the tyres.

They were suffering from being kept constantly underinstated.

No new tyres were necessary. The owner was told this, and his order for the new and more expensive tyres returned to him.

And his saving was enough to pay for "Stitch-in-Time" Motor Service fee for a period of more than two years. So, naturally, he enrolled immediately.

Now, there is nothing big or extraordinary about this instance—it is just one of the day by day series of savings effected by the "Stitch-in-Time" Motor Service—savings which are merely one of the methods by which this Service more than pays for its small cost per annum.

If your car is 100 per cent efficient, 100 per cent economical, and your motoring 100 per cent pleasure, you don't want the "Stitch-in-Time" Motor Service. If it isn't-

#### Get the "Stitch-in-Time" Booklet

This booklet details the manifold ways in which the "Stitch-in-Time" Motor Service operates to the practical benefit of every owner-driver. It explains the comprehensive operation of the Service, how it enables you to maintain your

car always at its highest pitch of efficiency and economy, and how it further operates to your pleasure and convenience by regularly performing for you all such duties as greasing, oiling and adjusting your car. Send a postcard for this Booklet to-day.



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#### COWDRAY OLD ENGLISH HOME.

Cowdray is open without let or hindrance, and the motor-owner desiring to visit it should go by way of Guildford and Godalming. A mile further along the Portsmouth road, at Milford, instead of rounding to the right with the main road, keep straight on for a quarter of a mile and at the fork bear Petworth. Thence the Portsmouth road is regained near Milford by way of Chiddingtora and write.

The with us in thanking the Automobile Association's Touring Dept. for this excellent, though pitiful, tale of Cowdray's departed grandeur.

The maiden's having exclaimed when right. In returning, turn right at Easebourne into a gated road and so through Cowdray Park to

OWN in Sussex, in a part of the county where many of the men are heavy-Malch footed and slow through the following of the plough and appinions by Schange knowledge and opinions by alike to Rayswater and Unknown alike to Bayswater and the Old Kent Road down in Sussex, in a part of the county, one says, that is on the proper side of the South Downs that is to say the north side, the opposite to say the north side, the side that is dotted a number of little Londons-bythere stands, on the edge house that it park, the shell of a house that in its heyday may well heen of the have been accounted one of the tateliest of the many stately homes of England. That is to say much, but whother, as the house is called but whether properly Cowdray House Cowdray Cowdray Cowdray Cowdray House or Cowdray Cowdray Hou-Time to determine was built at time to determine was built worther domestic architecture Worthy to be dubbed an art and that sincefirst ancestor of that since-Was unhamily called Jerry builder

Cowdray was built in the reign of Henry the Eighth by his of South in the reign of Henry the Eighth by his of South heirless, bequeathed it Earl of Southampton, who, heirless, bequeathed it half-broth ampton, who, heirless, browne. Sir Anthony, to his half-brother, Sir Anthony Browne. Sir Anthony, which, migrated to Databa enlarged Cowdray, which, half-brother, Sir Anthony Browne. Sir Anthony migrated from Battle, enlarged Cowdray, which than six of oriel windows—one of them has no topous is typical Tudor. An The array of oriel windows—one of them has a horizone six stages or storeys—is typical Tudor. An energy stages or storeys—is typical typical and stages or storeys—is typical typical typical typical stages or storeys—is typical typical typical stages. than six stages or storeys is typical Tudor. The gateway, with corner towers, turreted and Brownes, is sufficiently well briting the gateway, with corner towers, turreted and the street to well arms of the Brownes, is sufficiently well to what of the Brownes, is sufficiently well paraby the sateway, with corner town the bound of the Brownes, is sufficiently were the for the bound of the Brownes, is sufficiently were the for the bound of the Brownes, is sufficiently were the for the bound of the Brownes, is sufficiently were the bound of the Brownes. The entrance porch, paramid is still the Brownes, arms of the Brownes, by the for the appetite of even the most casual tell, with its dozen itself. The entrance porch, paragraph, with its dozen itself, and traceried, is still tower. But the house itself. The entrance porch, parather, and so itself, valued and traceried, is still detached watch-tower. But the house itself. The characteried, is sunting visitor's so is an ivied detached watch-tower. But the house will surely spring the house will surely spring the visitor's so is an ivied detached watch-tower.

buckey be several melows of the Banqueting (or bow light and final visitor's so is an ivid detached the surely spring spring the several noble windows of the Banqueting (or and transoms—how light and the several noble windows of the Banqueting (but, as we see afternoons and transoms—how light and the see afternoons four centuries than three, how Well designed and set; how worthy the trust the builder reposed in them!

She ower a century and a quarter, a "maiden of the forlows, but not tearful, nor yet a whiner. ordeals, her forlornness to fire, that dreadest of dread something also to our English "many high winds and raging, rain dripping and leaded and racking frost. The beating, and something also to the high winds and raging, rain dripping lad, or of the loaded snow and cracking frost. high winds and raging, railly of the agony of fire is become age-long with our

But for the agony of fire is become to the case of the forlorn and wind and weather, though of the case of lady call a condraw are not the whole case. there is likewise called Cowdray, are not the whole case.

There is likewise called Cowdray, are not the whole case.

The cowdray are not the whole case.

The cowdray called cowdray are not the whole case. There and wind and weather, though is likewise ivy, and has been these many years.

delicate by and lacework! one can fancy hat delicate, beautiful lacework!" one can fancy



"The entrance porch, parapeted, with its doorway, vaulted and traceried, is still stately."

the ivy began to decorate her skirts. Delicate—ay, to all seeming, but tough as a Toledo blade. Beautiful too, but did ever beauty, in the nature of the case, preclude deceitfulness? As the Toledo blade can be an instrument of cruelty, and beauty a cause, so ivy, only with this difference: ivy may prove at once cause and instrument. Ivy, for all its fair seeming, is as cruel as the cuckoo-but, again, with a difference. For as the mills of God grind slowly, so ivy takes long to wreak its wretched ruin. It cozens the stone wall or the brick with warmth, so cozens it for years and years, it may be for centuries. But there comes a time when the wall, in the hard grip of the ivy, first crumbles and then falls. Perhaps our dear lady of Cowdray, with the ivy, once lace-like, now heavy about her, has an inkling of the impending. If so, her bravery is as admirable as her beauty is wistful.

By our plucky lady of Cowdray's ordeal by fire there hangs a tale.

Sir Anthony Browne bought from, or was given by. Henry the Eighth—or it may have been Thomas Cromwell all that fine messuage called Battle Abbey abbot's lodge, monastery, refectory, cloisters, stewponds, vineries, woodyard, artificers' quarters, yea, even the very church, whose high altar marked the spot where Harold "fighting, fell." Doubtless Sir Anthony, the story notwithstanding, struck a good bargain--who bartered with the State in those days (and, for that matter, in these too) usually did pretty well, thank you!)—for, true as is the ending of the story, the beginning may be you will observe that "may be" is distinctly non-committal may be merely an old wives tale. It goes, the beginning of the story, that the last monk to leave the abbey imposed on Sir Anthony a curse. The monk—need it be said? was a venerable one; the curse—again, in view of the ending of the story, need it be said?—that the last heir of the Brownes—in male tail, it is to be presumed—should himself be drowned and his house destroyed by fire. Now to the ending. On the night of September 24-25th, 1793, Cowdray House (or Castle) was gutted by fire, and within a month of that date the last Viscount Montague-either Sir Anthony Browne or his son had been raised to the peerage as Viscount Montague—with a companion, was drowned in a mad attempt to shoot the Falls of the Rhine at Laufenberg.

Prophetic curse or no prophetic curse, 'tis a sorry tale, however romantic. Of the last of the Cowdray Montagues we know nothing except what the story tells—that he was one of those rash sportsmen of which our race has



"The visitor's supreme joy will surely spring from the noble



Some evidence of the ravages of time, fire, weather-all

bred a plenty, and in which it ever has had the grace to rejoice. His forebear too, old Sir Anthony, was of the stuff of heroes and English all over. He, though a Roman Catholic, though a grandfather, when England was threatened by the Armada, rode off, with his sons, one of his grandsons, and a retinue of two hundred of his neighbours and tenants, to offer his services to Queen Elizabeth at Tilbury. And she-herself half man and dearly loving a full one touched by the enterprise and lovalty of Grandfather Anthony, three years later, in 1591, paid him the high compliment of a visit at his house beautiful called Cowdray. The tale of the visit, which has been preserved, makes pretty and quaint reading but is too long to quote. It must suffice to say that there was a masque; that deer were shot in the park—one by the Queen herself; that on the fourth day of the visityou will observe that the visit was no mere call, nor yet an informal halt by the way—a table forty-eight yards long was laid for the high guests' dinner; and that on the fifth day Her Rousing Majesty, about to depart, knighted six of Sir Anthony's guests. He, good man, thought he had done Edward the Sixth, on a visit in 1552, "marvellously, nay,



A preture sque glimpse.

rather excessively," but the enter ment of Elizabeth outshone the by ever so much.

And now as to you, the reader ting my high faith in the pictures of Cowdray, that beautiful shell "maiden all forlorn," to the test, a ing to your own doubtless non criminating another. criminating aesthetic sense. Mid Castle (or House) is night where is an old-fashioned inn, classified by the Automobile Associated as a two stands as a two-star house; at Petword Swan, also two-star, though it, ju house, is nearer a three-star. deference to your inner man.







THI 30-40 SIX CYLI

has complete Trial, under Royal Nethe

CODE RIGHT SERVICE

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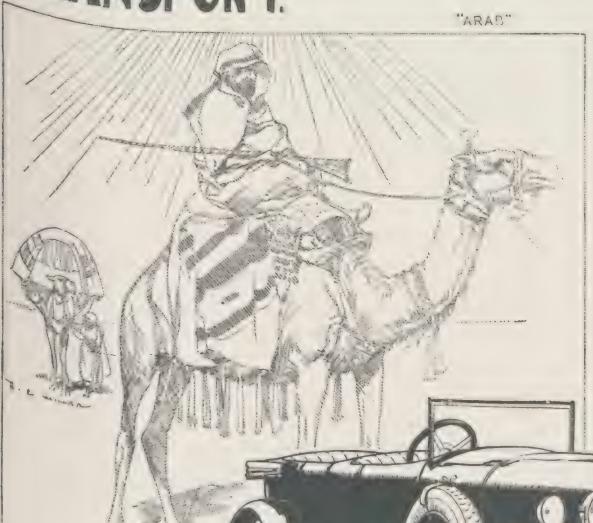
ly," but the enter

byou, the reader, the in the pictures quite to be autiful shaper, "to the test, in doubtless hetic sense, se) is night ashioned inn, the world ashioned inn, the world tar, though it, the a three-star rinner man.



# THE EVOLUTION OF TRANSPORT.





18,869!

THE
30-40 H.P.
SIX CYLINDER

SPYKER

has completed the World's Greatest Reliability Royal Netherlands Automobile Club. It has run

NON-STOP DAY AND NIGHT 18,869 MILES AT 25 M.P.H.

THE BRITISH SPYKER CO., LTD. 33 DUKE ST., ST. JAMES'S, LONDON, S.W.

Baye xly

## George Heath's Message to the Motor Owner

Success in Motor Salesmanship is not so common as to make every man who enters on the business proud of the Organisation he builds up.

But I am real proud of George Heath (1920) Ltd.

I have watched it grow from small beginnings into one of the largest Car-distributing Concerns in the British Isles and, indeed, have been responsible for the policy which has guided and controlled its destinies through all those years.

I attribute its expansion to three things—the experience which enables the Organisation to select for handling only such Cars as are pre-eminent in value—the ability to gather together such a staff as is capable of realising that, in selling Cars, "service" both of the Car and the Organisation behind it must come first, always and at all times, and—last, but not least, personal control and supervision.

I have found that to sell the Car is not the "be all and end all" of the business, there is something more—the care of it after sale.

I analyse the situation thus—the Car is a branded article, speaking generally (there are, of course, exceptions) all Cars bearing the same brand possess the same merits—the same selling points. Salesmanship commences by making the most of those merits, while avoiding all exaggeration, but sales are multiplied not by that alone but rather by the care which the Organisation selling expends on "tuning up," advising the purchaser on how to get the best out of his purchase, and doing all those things after the actual sale which will insure his lasting satisfaction.

And it is that policy which is the basic reason for the success of George Heath (1920) Ltd.—it is that policy which will insure its further

growth and—it is that kind of service which that

Organisation offers YOU.

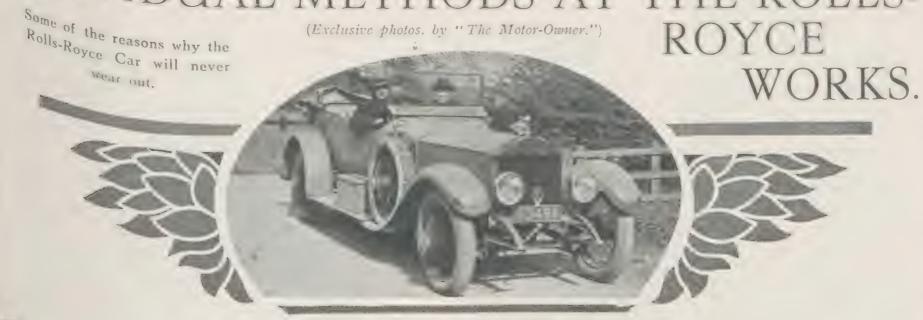
GEORGE HEATH (1920) L! BIRMINGHAM

Wires ... AUTOCAR, BIRMINGHAL

Agencies:

Austin, Angus-Sanderson Armstrong-Siddeley Sunbeam, Darracq, Daimler Minerva, Overland, Swift and Cadillac.

# INDIVIDUAL METHODS AT THE ROLLS-



An up-to-date Rolls-Royce.

Shall I remarked to me a few days ago—someone, shall I say, who ought to have known better? that a certain very excellent American car was Rolls-Royce in this country. In this country! In America, the Roll is country. In this country of that car, haybe, the Rolls is challenging the supremacy of that car,

If you ask the question, which is the best car in the world, which is the best car in the world, which is the best car in the world, and you wrong the will reply: "The Royce ", which is the best car in the works Royce", which is the best car in the works Royce ", which is the best car in the works Royce". Well,

that was a question to which I set myself to find an answer example. I be a continuous the Rolls on the road, but, recently. I know and admire the Rolls on the road, but, it is too closely emulated by several other performance, it is too closely emulated other of grace. So that cannot by several other cars in this year of grace. So that cannot into the reason and admire the several other cars in this year of grace. So that cannot from be the reason, and I thought a trip to Derby—which I had line visited since I there from the provide Manchester last the works were transferred there from it, seems)—might provide Manchester last century (as it seems)—might provide enlightenment.

Common decency wouldn't Thow the answer now. It is simply that the reality for the answer now. It is simply that the reality for the can never wear out. Common decency wouldn't common decency wouldn't all. A t it, for one thing, after the simply astounding care that are into its. The but that is not quite all. A but into its manufacture; but that is not quite all. A the ills that cannot wear out is not likely to suffer much from These two things combined the ills that cannot wear out is not likely to suffer much more bound to coars are heir to. These two things combined show that cars are heir to. These two things could short of a course for a car a reputation that nothing short of a course of subsequent bad workmanship could can, and I saw of subsequent bad workmanship could shake, and I saw enough of the works to realise that this can never happen.

It is because the reputation of the Rolls-Royce rests car, however good long-proven worth that no American The real good, can seriously challenge it.

The real secret lies in the methods of manufacture, of the specific lies in the methods of manufacture, of the specific lies in the methods of manufacture. He is The real secret lies in the methods of manufacture, or suit each individual surchaser's requirements. He is The springs, for instance, are built up and august each individual purchaser's requirements. He is mad, what his are begives of asked each individual purchaser's requirements.

Made what his average load will be, and the springs are spill up to suit from the figure he gives of made what his average load will be, and the springs are spile up to suit a variation from the figure he gives of

It is the way.

The letther way.

The letther way.

The letther way.

Delle-Royce part that tells. The back and the of each Rolls-Royce part that tells. The back and the faces as well as the bearing surfaces of the back and the faces as well as the bearing surfaces of the back and treated the back and the faces as well as the bearing surfaces in hand. Then I have a surfaces as well as the bearing surfaces. Then I have a surface and treated and treated are treated, and treated are treated, and treated are treated and treated are treated. Then, again, the crankshaft is perfectly balanced again Then, again, the crankshaft is perfectly barance, and then, again, the crankshaft is perfectly barance.

Then, again, the crankshaft is perfectly barance.

Then, again, the crankshaft is perfectly barance.

Then, again, the fitting shop, it is equipped afterwards, in the fitting and balanced again to disturb the Weight and clutch ring and balanced again the weight of a hair, almost, is sufficient to disturb the whole weight of a hair, almost, is sufficient to distant init. Even the ingenious eccentric drive to the air-pump is balanced; and it is easy to see that much of the smooth running of the engine is thus accounted forsmooth running and longevity, in fact, for absence of vibration must mean absence of wear.

To see the fitting of the universal joint sphere within its housing is an education; it seems to the layman an almost impossible task to obtain a perfect bearing between these two surfaces, and yet it is done on every Rolls-Royce car that leaves the works; and it is necessarily nearly all hand work.

The back axle of the Rolls has been a source of envy to many another manufacturer. I don't profess to know any secrets in connection with it; but I saw crowns and bevels carefully "married" and set aside, and I saw back axles taken down from chassis after test runs and subjected to a careful hand "stoning" of each separate tooth.

The same care that is put into the fitting of the back axle gears is used in the mounting of those of the steering—and, for that matter, all the engaging gears of the car—but this is a somewhat different proposition. The steering gear, it may not be generally known, is so arranged that slightly more effort is required when the centre of the worm is in engagement than when the wheels are locked over in either direction-a plan that has obvious advantages, but calls



Testing the slipping clutch of the Rolls-Royce electric starter.

February, 1921



magneto would call for no attention on the part of a motor-car manufacturer, and when I heard that never a plug nor a magneto is fitted to a Rolls-Royce engine without being first tested under pressure, I thought this was carrying precaution rather far. I believe I said so; anyway, I was shortly shown the testing apparatus at work. Will you believe me when I say that the first two plugs, of the best-known English makes—both removed from their original packing under my own eyes—failed; failed, moreover, far below the usual working pressure of the Rolls-Royce engine?

The Rolls, I believe, is the only car using an electric starter made by its own manufacturers, and even in this unit I noted a point in which it possesses individuality. The starter is provided with a slipping clutch to ensure gentle engagement. This clutch is adjusted to grip up to a certain pressure, beyond which, of course, it must slip, and each clutch is very carefully tested and adjusted so that it shall come into operation at precisely the correct

period.





On looking over the engine and witnessing the media of manufacture, aero-engine practice and the results are not at once visible. As a matter of fact, however, makers must have learnt many valuable lessons from war-time aero work, and, visible or not, the effect of lessons is a saving of 80 lb. weight in the post-war Royce engine.

I paid an afternoon visit to the Derby works, and have liked to stay for a week. Motor-car factories rule bear a monotonous similarity to each other, particular one seems to be full of original methods observation of which makes time fly. Even on that noon and in the half-dozen or so operations which shown to me, however, I got a very good idea of which Rolls-Royce car stands where it does, and why no machine-made car is likely to threaten it.

The firm has at Derby an excellent scheme in full will ing order for the instruction of drivers—either profession or owner-drivers—in the simple mysteries of the chassis. This I hope to deal with at a later date



On the one hand is dirt

#### on the other is SPRINKO



To Clean Hands.

IT'S very easy to get your hands grimy and dirty, but it's not so easy to get the dirt off -in the ordinary way; but just use a little Sprinko. Sprinko removes the most obstinate grime and dirt quickly and thoroughly, and without any need for the scrubbing which only makes the skin rough and sore. Sprinko is made for one purpose only—to clean the hands.

Just dip the hands into cold or warm water, sprinkle a little Sprinko on them, rub thoroughly for a few moments, then rinse. Your hands will be clean, smooth and white.

IN NEW STYLE SPRINKLER-TOP BOXES, 1/-

Of special value to motorists, cyclists, allotment holders, sportsmen, etc. Sprinko does not injure the skin. SOLD BY ALL LEADING CHEMISTS, GROCERS, STORES, ETC.

Clean Hands with a Sprinkle. VINOLIA COMPANY LIMITED - LONDON.



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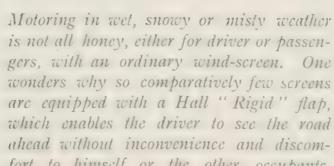
#### "IT'S THE LAST

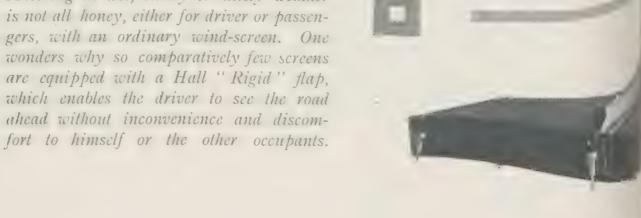
Don't choose acce

Accessories may be either useful of secure at least that they harmonise will of tar"; but it is equally easy either A variety of accessories is illustrated he

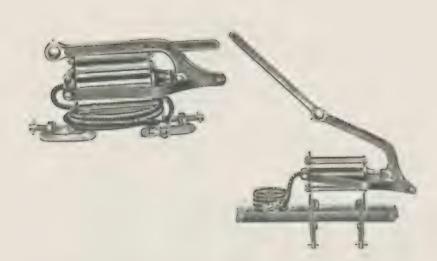


We must have a good light to drive by, for the public safety as well as our own comfort, but there is no reason why other people should be annoyed. The Stewart lens, at 8s. 6d. a pair, is said to overcome the glare difficulty and to give a perfect light.





Two Views of a New Pump.



The Hilton pump has the obvious advantage of novelty, but a study of its method of operation seems to bear out the makers' claims of easy working. The pump clamps on to the running board and with its considerable leverage it certainly should inflate even a large tyre in record time and—what is perhaps more important—with record ease.

If a speed indicator which is seldom the one that blend hub cap

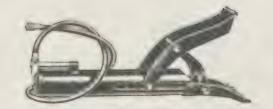
Improvements in detachable wheels and rims have ali fiend of its terrors. Wheels, such as the Sankey, can patterns from stall patterns from steel artillery to complete disc, and each pall than the last in being the than the last in point of detachability. For those who the recognised type of wheel, probably the specimen illustration a Sankey detacked. a Sankey detachable steel artillery wheel with the addition Warland detachable rim, a most useful combine

# THAT MATTERS!"

of the Car.

It is former, some effort should be made to spoil the ship for a ha'porth or to apply it in the wrong place. of tary to "spoil the ship for a hapon-useful or to apply it in the wrong place. useful or to apply it in the wrong place.

and some not entirely un-ornamental.

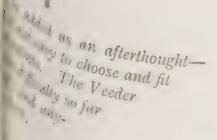


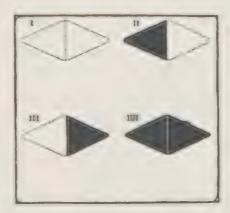
ling chested roof trunk is an ay out of the luggage diffipermanently closed car. It permanently closed cur. of indistinguishable, and its of course, are always accessible.

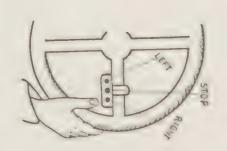
Here is another tyre pump which has a claim upon one's attention. It is simple, has few parts to get out of order, is very light and comparatively inexpensive. The price of the "Rem" pump is 47s. 6d., which includes a gauge and wooden box.



Mascots, if usually highly decorative, are much of a muchness, taking the general form of female forms more or less negligently clad, but the specimens illustrated strike a distinct note of novelty. They are in carven wood, and quite a wide variety of beautifully fashioned animals' heads can be obtained. Needless to say, the mascots are of remarkably light weight.









The Autopil is a Norwegian invention; and it is a very much needed accessory. It takes the form of a rear lamp which, by pressing the necessary switch on the steering wheel, indicates the driver's intention to (II) turn left, (III) right, or (IIII) stop. Fig. 1, of course, signifies straight ahead. All motorists must have felt the need for some such means of signalling to other drivers at night.

#### CARS WE

The 11.9 h.p. A.C., the 16 h.p. Piccard-Pictet.



A Standard A.C. on the Road.

#### HAVE TRIED

the Wolseley Fifteen and the 29.4 h.p. Studebaken

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HE A.C. is probably one of the best known of the smaller type of British cars, and when one considers its appearance and public performances of to-day it seems almost impossible that this graceful, fast and comfortable little vehicle should have been evolved from the crude—one almost said grotesque—three-wheeler of earlier days.

It is not necessary to go into details as to the behaviour of the car on the road; its excellence is too well known. Suffice it to say, therefore, that we found it more than satisfactory in every respect, and that we were particularly impressed with the efficiency of the suspension; especially with the ingenuity of the rear reinforcement, which comes into play only when the dickey seat is occupied.

We took the car by byroads to Brighton and thence to Worthing, returning via Arundel, Chichester, Midhurst, Liphook, the Devil's Punchbowl, Guildford, and the usual Portsmouth road. It will be admitted that this was a fairly comprehensive test of everything but durability, which is a question of time, and therefore, when we say that the car gave absolute satisfaction it will be seen that this is high praise.

We must have our usual grumble, however, while admitting that the point at issue may have been due to our own ignorance, stupidity, or what you will. We found that the clutch, excellent in every other respect, had a tendency to squeak on engagement, and found no means of curing that squeak. It appeared to be caused by the dry

faces of the clutch plates rubbing together in the initial slip before complete engagement; and as it is essentially a "dry" clutch, what was one to do? This, however, is quite a trivial fault at worst, and one easy, doubtless, of elimination.

We liked the car as a whole, from both the driver's and the passenger's point of view, but we particularly admired the homogeneous lines of the body and the general air of completeness of the vehicle.

The instrument board and its arrangement of dials not only looks well, but is planned with a view to convenience. The lamp switches, instance, are within easy reach of the driver's hands the ignition switch, a mere pull-out or push-in button is by itself immediately behind the steering pillar while, finally, the equipment includes a good clock.

While an electric starter is by no means essential with car of the size of the A.C., especially in view of the extra cost and the modern necessity for general economy, we the rather regret its absence; but the engine, once one has trick of it, is a particularly easy starter, so it mattered little.

We have yet to find a small car with better brakes, with good brakes more easily adjusted. Most many facturers make a point nowadays of easy brake adjustment, and quite frequently it is possible to perform the operation without the use of a tool. Too often, however, it is necessary to grovel beneath the car to effect it, but on A.C. the adjusting rods and nuts are accessible with scarcely a necessity to bend the back.

If we might be allowed to suggest a small improvement it would be that the belt-drive to the dynamo might arranged from a point where any whip in the belt would not cause noise through the belt striking adjacent engine parts. The present arrangement has this small disadvantage, possesses the off-setting advantage of simplicity.

Taking the A.C. altogether, however, it would be difficult to imagine a more thoroughly satisfactory little vehicle.



The A.C., although from its engine dimensions entitled to the description "light car," is nevertheless capable of carrying a cosy coupé body.

THE 16 H.P. PICCARD

An unusual interest attaches to the Piccaid Pictet—for its nation ality, for its valve system, and because its was the writer's trial of this make trial of the scope for interesting comparisons. One first impressions of the first impressions of and car are pleasant, in the main they are a lised. Honested however, it revealed to the serious cal faults nor a serious detriment, are never theless regrettable, since the unnoticed on

THE MOTOR-OWNER

February, 1921

The electric self-starter should prove efficient—it is spacious brake drums subsequent to a hurried halt.



The Piccard-Pictet, a Swiss sleeve-valve engined car.

robust enough, and a double-purpose switch on the fascia board controls both ignition and lubrication synchronously. A commendable point is the button facing the driver which, by a touch, lubricates both the universal joints—a practice well worth wide adoption. A very modern Zenith and a capacious V-fashioned and effective radiator are embodied. The engine keeps remarkably cool—it is but comfortably warm to the hand after an hour's hard driving; so are the Other details that deserve notice are the Westinghouse

high article production does not fail to strike one on a hand the firm is freal to admit that these draw-tried. back "Xist at a street as the real particular car we tried, Mile firm is frank enough to admit that these did not to be served any rate on the particular car we tried, must point out that they While the strains enough to the particular car we the strain to be scrupulously fair, we must point out that they are the chiefly the cut out that they are the cut of the cut o and the chiefly the outcome of experiments, eminently laudable the chiefly the outcome of experiments, eminently laudable the chiefly the outcome of experiments. We will do the mechanical ideal.

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Andre: the Som Front.

We will deal with the pill first, following up with the ansi that is the Our main criticism is the langing set up a car's due. Our main criticism is the clanging set up by the foot brake when it is in use. A mall matter but annoying. It will shortly be corrected.

The series are the cars due.

The series are the cars due. matter—but annoying. It will shortly be concerning when changing some difficulty in passing through the from second to third, and when changing speed—i.e., from second to third, and That I speed—i.e., from second to third, and matrator That, however, was due to the personal race. Would disappear with experience. The demonstrator than is scope for improvement, Would disappear with experience. The demonstrational ver, is in the Where there is scope for improvement, The car did not absorb More there is scope for improvement, while the rear springing. The car did not absorb and the made for the first the rear seats were empty that the rear seats were empty that the rear seats were empty the rear springing.

In the rear springing.

In the rear springing.

In the made for the fact that the rear seats were empty that it was the standard wheel bases. It appeared to us to be shorter of the two standard wheel bases. that it was the shorter of the two standard to us to be designed for a full load.

Solid offiset to us to be designed for a substantial trong qualities. The car is eminently a substantial trong solid. The comfortably inclined offiset these criticisms there are numerous and very good qualicriticisms there are numerous and very trong qualities. The car is eminently a substantial receive you, satisfactory. The comfortably inclined Both trong, Tuanties. The car is the comfortably meaning receive you with spaciousness; from cold winds the and charles and charles and charles are specially spaciousness. light receive you with spaciousness; from cold winds and shoulder-reaching sides protect you. Both stylish is the spaciousness and the equipment is the spaciousness, and shoulder-reaching sides protect you.

The spaciousness, and shoulder-reaching sides protect you.

The spaciousness, and the equipment is the coachwork and the coachwork are the coachwork and the coachwork are the coachwork and the coachwork are the coachwo down that drain your money you obtain something that for desirable additions. Most interesting your pocket for desirable additions.

Most drain your money you interesting of all to him with a mechanical bent is popper. Roy of all to him with a mechanical bent is popper. invaling of all to min with the sleeve of the four single sleeve, with a motion such ing sleeve value its clean compactness poppet-Beneath its clean to each of the local state of the that in it describes an ellipse. As to the advantage opinions differ. What we this valve system opinions differ. What we it sleep on "to a good to be a superficient to it sleeves to a gear. And whether you put it down to a gear. And whether you put it down to have for not the car impressed us as being exceptionally

The for its size.

The car impressed a speed that is surprising. If the develops a speed that is surprising. If the paralleled Cæsar's wife this ligure of The Consideration of the develops a speed that is surprising.

The develops a speed that is surprising. the develops a speed that the develops a spe that faced us parame.

Tretches on the kilometre dial; and that in single mile the round had refused a prolonged speed test. On the kilometre dial; and that in single indirect indirect was lively—very—but not On indirect gears the car was lively—very—but not the road On indirect volte unkindly refused a property of the car was lively—very—but not substituted by and slight "periodicity" manifested itself ritardando, and is capable of marked acceleration and dynamo and magneto, the tyre pump built in with the gear box, and delivering air at an accessible point, and a hood in which springs make it nearly self-raising. On the whole, the 16 Piccard-Pictet may rightly claim to be a particularly sound and desirable investment, and the persons responsible for it are not designers merely, but show themselves thoroughly acquainted with the needs of that individual who, after all, may surely vic with the proverbial piperpayer, the user.

#### THE WOLSELEY "FIFTEEN."

The proposed taxation on the basis of horse-power and the present high price of petrol are likely to put a premium upon cars of moderate R.A.C. rating, provided that they give satisfactory figures in the matter of petrol consumption. Such a car is the Wolseley "Fifteen" (15.9 R.A.C. rating) with which we recently had a very pleasant experience in



#### THE MOTOR-OWNER

February 1921

the country between Lichfield and the top of Edge Hill. A consumption of 28 miles per gallon is quite usual on this car, and 31 m.p.g. has been registered during many months of ordinary running.

Great attention has been given to springing by the Wolseley Company, and the springs, though quite simple, are particularly efficient and impart a floating motion to

the car which is very pleasant.

A full load of five passengers, "not to mention the dog," was carried throughout the whole trip. It is hardly necessary to say that the engine was fully able to answer to all the demands made upon it. A less powerful car would have covered the course without difficulty, and the Wolseley engine, with its overhead valve gear head, not only did the work, but did it well and easily, without noise and without fuss.



A Wolseley "Fifteen."

No attempt was made to push the car to its extreme limit of speed, which is in the neighbourhood of 50 miles per hour, but we toured along pleasantly at a comfortable pace. At the same time, we had no difficulty in passing

anything we wished to pass.

The feeling of power in reserve which enables long hills to be taken at a high speed in, an effortless rush is very pleasant, while the acceleration produced by a slight depression of the pedal is remarkable. Naturally, the ascent of Sunrising Hill required a lowering of the gear; the hill was climbed easily and quickly with no labouring of the engine, and that is all that is necessary.

After climbing Sunrising we drove along the top of the ridge past the Round Tower, a popular resort of Midland motorists, slid down Edge Hill—a good test for the brakes, both of which operate by expanding in drums on the rear wheel and are Ferodo lined—and returned to Warwick through Kineton and Compton Verney, the residence of Lord Willoughby de Broke. Near here there are several minor hills, some of which are steeper than they look, but they occasioned no difficulty.

No untoward incident occurred to mar the pleasure of the run, and we returned late enough to test the efficacy of the lighting, while the electric starting proved its use and convenience after several voluntary stops.

#### THE 29.4 H.P. STUDEBAKER.

A couple of Studebaker models, both with six-cylinders, are on the market this season, with very similar engines, save for a slight difference in the bore. As far as one can judge from an all too brief fragment of a day the smaller, known as the "special six," should prove a good investment.

We have known cars with more elegant coachwork, but it is not everyone who either wants or cares to use a roadfaring boudoir. Unless you are very other-worldly you can't really appreciate the innermost niceties of antique lacquer or ormolu inlay, and so forth. To most of us it is the practical article that appeals, and in the same you have the reason for our *penchant* for the Studebaker represents.

For it is eminently serviceable, and the between what it costs and what you might pay ornate car that can't perform any better would your wife not a few moons in chocolates, as well as the control of t



The angler is beginning to awake from his long hibernation will take him where he wills—even to the northern haunts of

enough over for a bachelor visit to Paris now all And here we have arrived automatically at the car good point—cheapness. Only 840 of the modern ated pounds will transfer the car and its responsible your possession. In exchange you get something It is not a mushroom production. It has lived it has attained "respectable middle age"—as albeit, hydra-like, it puts forth new models revivifying of the orchards.

The equipment is very complete—too much to the fact—and eminently serviceable. You feel the plenty of power; when it is accelerating you doubt of it. Part of this desirable quality is due to scientific carburation.

Dark blue is the standard colour, and the pretty good imitation of that which labels itself. There is a further good point in the fact that those of the side curtains above the doors open with point at which we have hammered continuously.

On the whole the 29.4 Studebaker is a car that give real value for money. It is not ornate; it is not one to be; nowadays sterling worth bears a more guise than shimmer and sheen.



The 29'4 h.p. Studebaker.

P

Page Whiii

#### TO OUR READERS.

E are constantly receiving complaints that readers cannot obtain their copies from the book-stalls owing to "The Motor-Owner" being "sold-out."

Order Forms printed below, thus ensuring the regular receipt of their copies. This is the more advisable in view of the great interest amongst the motoring public in the forthcoming Fuel Economy Tests organised by the Royal Automobile Club in conjunction with ourselves. The official announcement of the conditions, which is being eagerly awaited, will be made in our March issue, and in consequence we anticipate a record demand for the journal. This will be the case not only in March but in succeeding months also, since the progress and results of the trial will undoubtedly arouse widespread interest.

As will be seen from the selection of extracts from the press of the country and from the letters of leaders of the Automobile Industry, Fuel Economy is very much the topic of the moment in motoring circles, and, while it is a Publisher's business to form an approximately correct estimate of the demand for any periodical, this is especially important in the case of a magazine so costly to produce as "The Motor-Owner." Readers, therefore, will greatly assist by letting us know their requirements in advance through the media of these order forms.

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A	E	R
Angus, Sanderson, Sir Wm. & Co., Ltd	England, George, Ltd xliv  ix  rix  F  xv  iii Foresti, G xii	Rolls-Royce, Ltd xxxiii Rover Co., Ltd xxxv
Black Swan Co	Gaunt, W. C., Co iv Do xviii-xxix Goodrich, B. F., & Co., Ltd. 2 of cover  kiv xi  Haig & Haig, Ltd xvi Heath, George (1920), Ltd. xlvi Humber, Ltd 4 of cover  M  Motor Mania xviii	Sankey, Joseph & Sons, Ltd. xlii Service Manufacturing Co. xvii Service Motor Co., Ltd xxx Shaw & Kilburn, Ltd xxii Shell-Mex, Ltd xxii Sterns, Ltd xkii Straker-Squire, Ltd xxii Sunbeam Motor Car Co., Ltd. xxxviii Sun Engraving Co., Ltd xxiv  T  Taunton & Co
C	N	U
Chloride Electrical Storage Co., Ltd	vi North British Rubber Co., lix Ltd	United Motor & General Insurance Co., Ltd. 3 of cover
D	Ogston Motor Co.(1918), Ltd. xiii	Vauxhall Motors, Ltd v Vinolia Co., Ltd xxxvi, xlvii
Degory No-Jet Carburator	Pall Mall Motor Trading  Co., Ltd xl  Pirelli, Ltd xli  xiii Peugeot (England), Ltd vii  xiii Pyrene Co., Ltd xxiii	Whiting, Ltd i Willys-Overland-Crossley, Ltd xxxix

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3 of cover

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